COMMERCE AMERICA

U.S. Department of Commerce / September 12, 1977

Recreation & Business

THE AMERICAN CONNECTION

Newsmemo

Competition is having an effect in the fee-for-service medical field. Health maintenance organizations (HMO's), which provide enrollees with a specific range of services on a prepaid basis, now have 6 million members in 36 states. According to a new Federal Trade Commission staff report, there is evidence of competitive HMO impact in such ways as "reduced bed utilization rates of Blue Cross members, the creation of HMO's by Blue Cross and other organizations, and the increase in the level of benefits offered by Blue Cross..." HMO staffs tend to emphasize preventive medicine and family health care.

Consumer response to the coffee price increase explosion is loud and clear. Industry sources indicate that coffee consumption so far in 1977 is down more than 45 percent from last year. This is attributed to consumer price resistance and the impact of hot summer weather. The June monthly average retail price for a pound can of ground coffee was a record $3.93.

Sales of imported autos continue at a strong pace. Such sales appear certain now to exceed 2 million units in 1977, the first time for such a yearly total. The previous peak was 1,763,000, in 1973. Import penetration through July averaged 18.7 percent of total new car sales. That share is not expected to hold through the year, but will probably approach the annual record of 18.4 percent set in 1975.

The dream of owning a home is not fading in America. A new Census Bureau report on U.S. household characteristics shows that young married couples have continued to purchase homes, despite the climbing costs of housing. Home ownership among young husband-wife households (husband under 35) increased from 50 percent in 1970 to 57 percent in 1976.

Defective medical devices made in the U.S. are causing concern in Canada. The Canadian Bureau of Medical Devices has become alarmed over the number of hazards and deficiencies found in such devices. Tests made in 1975-'76 on 224 types of devices turned up 25 percent that were recalled or corrected. The next year, when 311 types of devices were checked, the recall or correction rate went up to 37 percent. Testing included infant incubators, cardiac pacemakers, anesthesia machines, kidney dialysis systems, and in-vitro diagnostic kits. The Canadian Government has instituted a mandatory hazard and deficiency reporting system for medical devices, as a warning measure.

Revise your definition of the word "household" if it brings images of three or more persons. More than half of all U.S. households now have only one or two persons, according to the Census Bureau report cited above. The actual percentage is 51.2, up sharply from 40.9 in 1960. Low fertility, postponement and dissolution of marriage, and the ability of young singles and the elderly to maintain their own households are some reasons given for the increase.

Weatherize, It's Moneywise. First Wisconsin thus tells homeowners, through its 42 bank offices in the state, of a practical energy conservation program it has set up. Key elements in the program are 7 percent annual interest loans, computerized cost benefit analyses for homeowners, and information centers at the bank offices. Improvements eligible for the loans include all forms of insulation, caulking, weatherstripping, storm windows and doors, clock thermostats, natural attic ventilation, vestibules, a furnace checkup and fireplace dampers.

A Commerce Department "Sell in Venezuela" campaign is moving briskly into its second year. Three of four exhibitions of U.S. products being held during the remainder of 1977 at a temporary exhibit structure in Caracas are sold out. To alert U.S. firms to Venezuela's current potential, the Department is offering its recent 154-page study "Venezuela: A Survey of U.S. Business Opportunities" at $2.25 per copy from Supt. of Documents, U.S. Govt. Printing Office, Washington, D.C. 20402, or through most Commerce District Offices.

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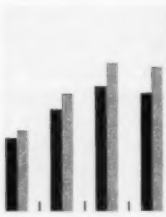

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COVER: American spending on recreational goods and services is estimated at far in excess of the annual U.S. outlays for defense requirements or home construction, according to our story beginning on page 7.

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No Strain On Manufacturing Plant Capacity Expected In 1978

This column was prepared by Commerce Chief Economist Courtenay Slater, in collaboration with staff economist H. Kemble Stokes, Jr.

Dr. Slater

Utilization of manufacturing plant capacity has been rising for a little more than two years but is still below the 1973-74 peaks. Recent strong economic growth, coupled with expectations of only moderate near-term capacity expansion, has renewed concerns of impending capacity shortage and inflationary pressures. Available evidence, however, indicates that capacity should remain adequate throughout this year and next and that the relationship between utilization rates and price behavior, when viewed historically, is neither as precise nor as strong as the 1973-74 experience might suggest.

The near-term outlook for capacity utilization and its impact on the inflation rate involves three related issues: a) the extent to which high utilization rates in 1973-74 were the result of insufficient domestic capacity and inadequate investment; b) the degree to which high utilization rates cause price pressures; and c) the general outlook for economic activity.

Although the 1973-74 rates of inflation were without postwar parallel, the high capacity utilization rates were not unique. Primary processing industries reached peak utilization rates of 93 percent in 1973, 92 percent in 1966, and 94 percent in 1955. Advanced processing industries reached peak utilization rates of only 85 percent in 1973, compared to 91-92 percent in 1966.

An important aspect of the 1973-74 experience was the sharp difference between utilization rates in primary and advanced processing industries: 93 and 85 percent, respectively, with an overall rate of 87-88 percent. This differential was created not by slower aggregate capacity expansion in primary processing industries, but by a marked shift in the pattern of demand. In 1966, both groups of industries reached peak utilization rates of 91-92 percent. Between 1967 and 1973 capacity increased by an identical 29 percent in both sectors. Domestic capacity was, however, unable to cope satisfactorily with the shifts in demand associated with the 1973-74 worldwide economic boom, which restricted imports of materials and precipitated large accumulations of inventories in response to fears of shortages and rising prices.

In materials industries the capacity gain was 25 percent, but this was a combination of very strong gains in chemical materials, and much smaller gains in basic metal and textile materials. The interaction of slower capacity growth and the shift in demand did cause capacity problems in specific industries. At present, however, these materials industries face near-term demand prospects quite different from the 1973-74 experience. Inventory buying patterns have been extremely cautious during the last two years and are not expected to be altered significantly for the immediate future. Foreign economic growth is generally expected to be less rapid than in the U.S. Neither domestic nor international factors would seem likely to create the intense demand for industrial materials that created price pressures and restricted economic growth in 1973-74.

The relationship between capacity utilization and prices is not as strong as is often assumed. The charts on the opposite page illustrate the strong price increases that accompanied high utilization rates in 1973-74, but do not indicate similarly strong price responses prior to this period.

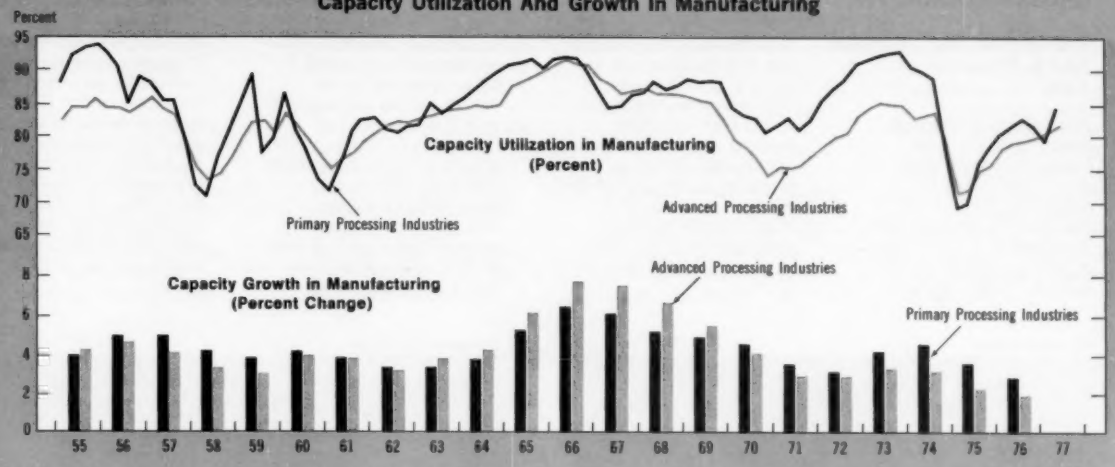
In 1966, when both advanced and primary processing industries reached peak utilization rates, resulting price increases appear to have been quite moderate. In 1955 utilization rates in primary processing industries, at about 92 percent, were between 8-10 percentage points above rates in advanced processing industries, thus presenting a close parallel to the 1973-74 situation. Prices of crude materials excluding food rose at rates of 10-15 percent, nowhere near the 40-50 percent increases that occurred during 1973-74. Monthly readings of intermediate materials prices excluding food during 1955 registered peak rises, year over year, of only 5-6 percent, far below the 30 percent rate realized in 1974. Undoubtedly capacity constraints and an expanding economy at times can create price pressures, but this does not appear to have been a pervasive influence, historically. There may never be a satisfactory accounting of the causes of inflation in 1973-74 but important factors surely include dramatically higher crude oil prices, poor world harvests, two devaluations of the U.S. dollar, and the removal of price controls. It is most unlikely that a similar combination of events will occur in the near future.

In the second quarter of this year capacity utilization in manufacturing was 82.9 percent; slightly higher in primary processing industries, slightly lower in advanced processing industries. One measure of the adequacy of capacity is to ask by how much production could increase before previous peak utilization rates were regained. In primary processing industries, even with no further growth of capacity, production could rise by about 10 percent before previous peak rates were realized. For advanced processing industries the production gains back to 1973 peaks would be only 4 percent, but 1973 was not a true peak since production was limited in part by the unavailability of materials. If, instead, 1966 is taken as a true peak utilization rate, the potential production gain in advanced processing industries is 11 percent.

Growth of real Gross National Product at an annual rate of 5 percent from mid-1977 to the end of 1978 would imply a rise of 8-9 percent in manufacturing output, an increase that could be accommodated by present factory capacity. In addition, capacity is expected to increase at least 4-5 percentage points during this 18-month period. Under these conditions the utilization rate would not reach 90 percent. It would be significantly below previous true peak rates.

In summary, manufacturing capacity is unlikely to be strained over the near term. Also, the evidence indicates that, given anticipated world market conditions, even a rise to historic peak utilization rates would not necessarily result in a significant acceleration of inflation.

Capacity Utilization And Growth In Manufacturing


Percent
Capacity Utilization in Manufacturing
(Percent)
Primary Processing Industries
Advanced Processing Industries
Capacity Growth in Manufacturing
(Percent Change)
Advanced Processing Industries
Primary Processing Industries
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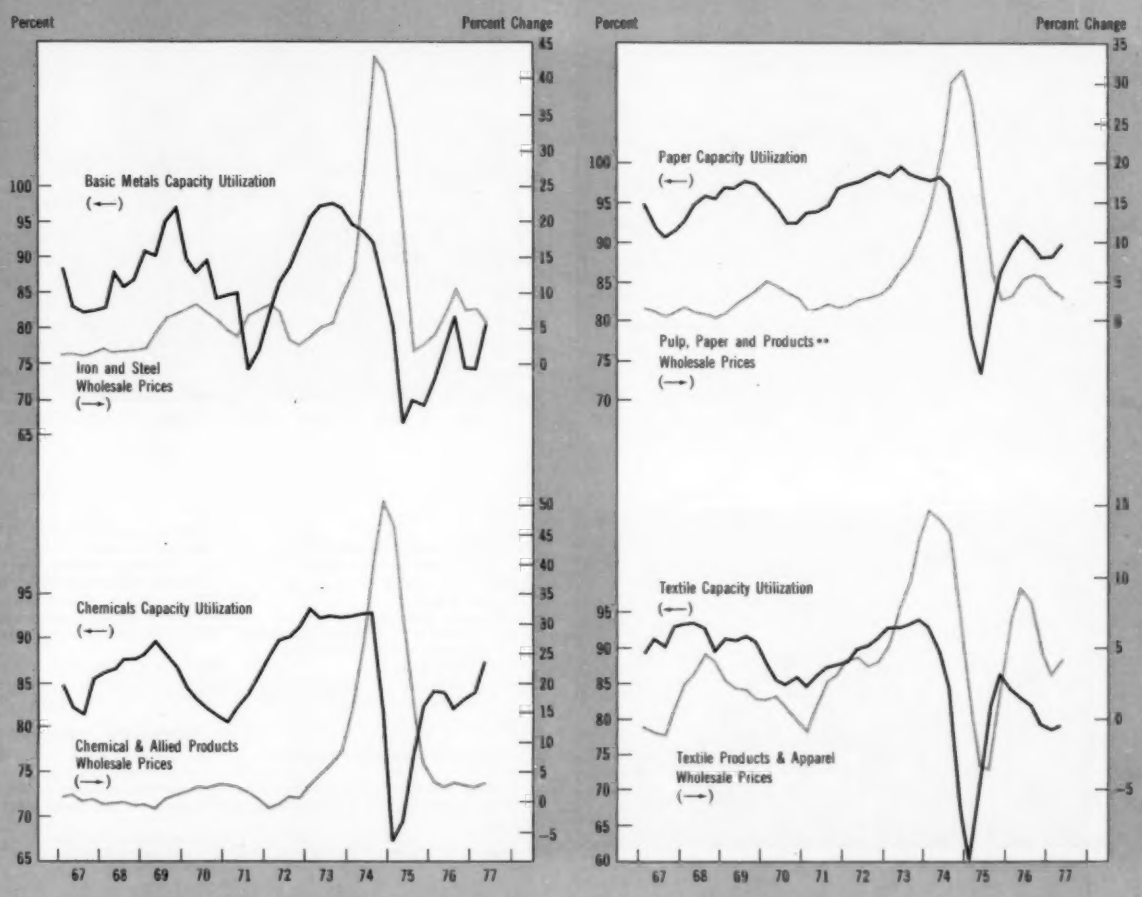
Materials Industries: Capacity Utilization and Price Change*



* Percent change from year ago quarter. ** Excluding building and board.

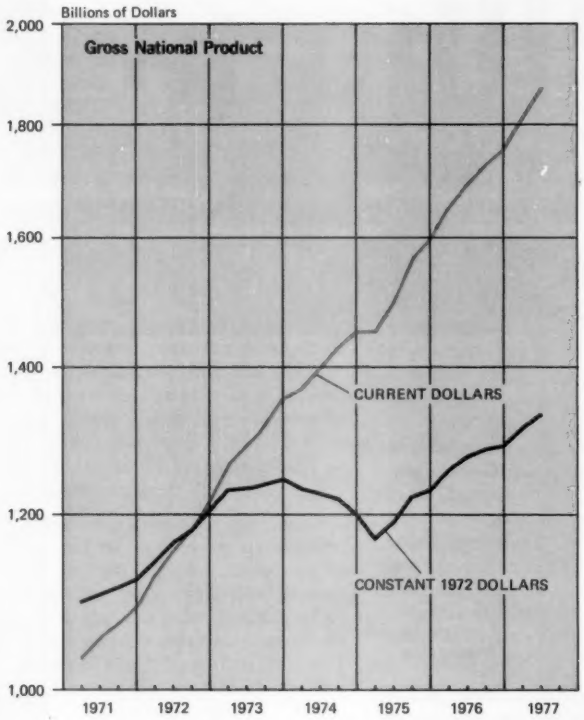
Source: Board of Governors, Federal Reserve; U.S. Department of Labor.

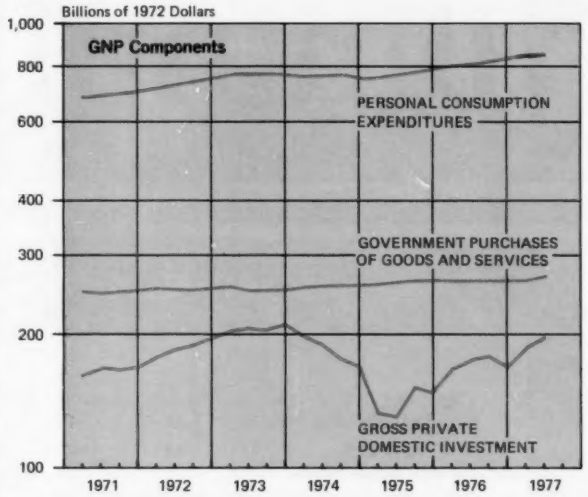
GROSS NATIONAL PRODUCT

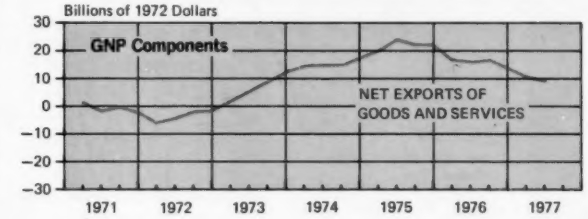
2nd Quarter GNP Increases 13.7%; Prices Up 7.0%

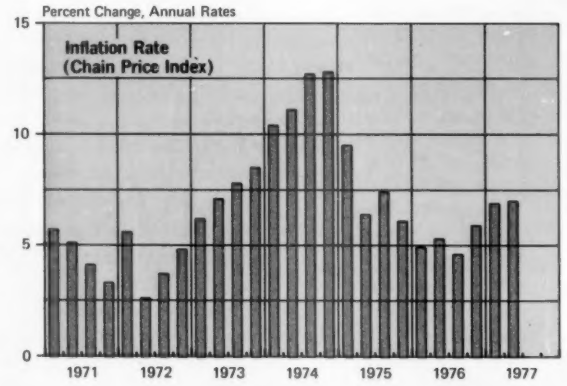
According to revised estimates, Gross National Product increased at an annual rate of $58.9 billion (13.7 percent) in the second quarter of 1977, compared to $55.4 billion or 13.2 percent in the first quarter. "Real" GNP (adjusted for price changes) rose $19.6 billion or 6.1 percent annually in the second quarter, compared to $23.6 billion (7.5 percent) annually in the first quarter. Prices, as measured by the GNP chain price index, increased at an annual rate of 7.0 percent, compared to a first-quarter rise of 6.9 percent.

Personal consumption expenditures increased $3.7 billion annually in the second quarter, compared to $10.6 billion in the first quarter. Gross private domestic investment rose $10.5 billion, compared to $17.5 billion. Inventory investment increased from an annual rate of $9.7 billion in the first quarter to $13.2 billion in the second quarter. A $1.8 billion reduction in inventories occurred in the fourth quarter of 1976. Government purchases of goods and services advanced $6.7 billion, reversing a first-quarter decline of $1.3 billion; and net exports of goods and services declined $1.3 billion to a 4-year low of $9.3 billion.









Source: Bureau of Economic Analysis

GROSS NATIONAL PRODUCT*	2ND QTR. 1976	1ST QTR. 1977	2ND QTR. 1977
	Billions of Dollars, Annual Rate		
Current Dollars	1,691.9	1,810.8	1,869.7
Constant 1972 Dollars	1,271.5	1,311.0	1,330.6
Personal Consumption Expenditures	815.5	850.4	854.1
Government Purchases of Goods and Services	264.4	263.3	270.0
Gross Private Domestic Investment	175.2	186.7	197.2
Net Exports of Goods and Services	16.4	10.6	9.3
	Percent Change, Annual Rate		
Inflation Rate (Chain Price Index)	5.3	6.9	7.0

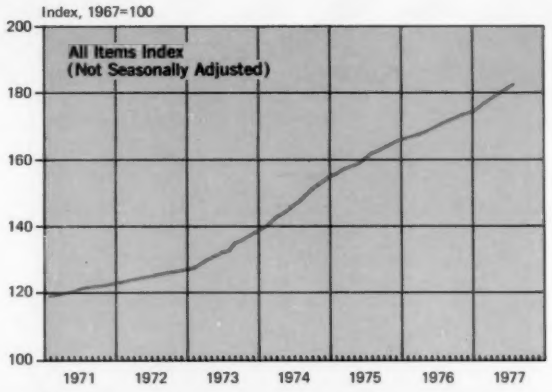
*Data reflect revisions in the national income and product accounts that are made each July to incorporate newly available source data for recent years.

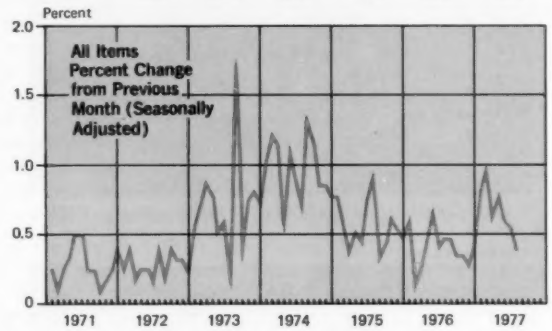
CONSUMER PRICE INDEX

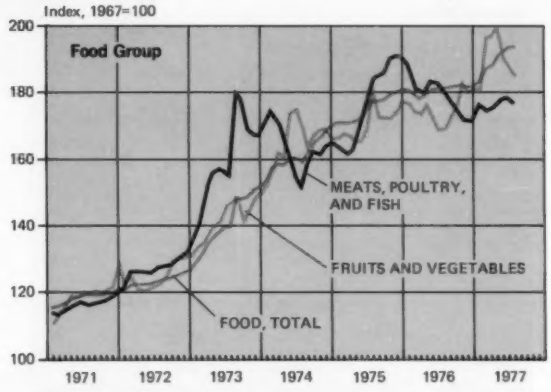
CPI Up 0.4% in July; Food Prices Slow

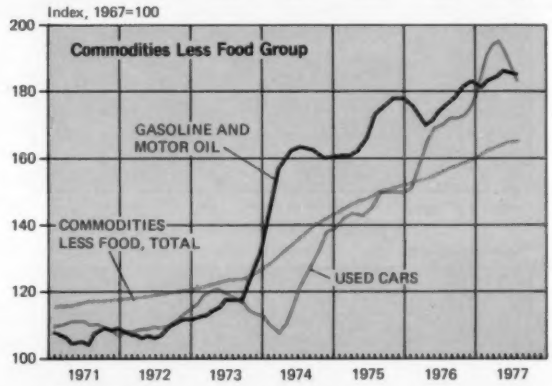
The consumer price index for all items rose 0.4 percent in July (seasonally adjusted), compared to an average monthly gain of 0.7 percent in the first half of 1977. The smaller July rise (4.8 percent annually) was attributed primarily to a slowdown in food price increases, from 0.8 percent in June to 0.1 percent in July. Prices for commodities other than food also rose less in July than in June, up 0.1 percent compared to 0.2 percent. The increase in prices for services remained unabated in July at 0.8 percent, about the same as in each of the first 6 months of 1977. The unadjusted all-items index was 182.6 in July, up 6.7 percent from July 1976.

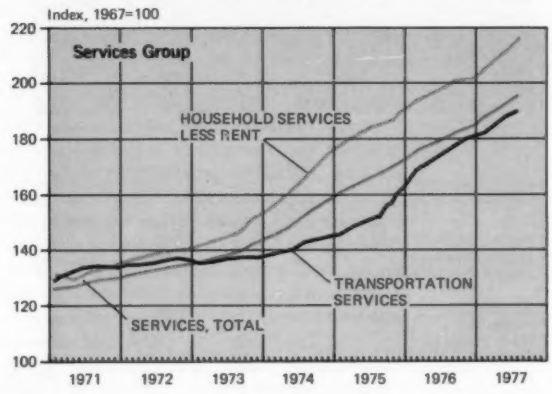
The index for food at home (grocery store purchases) declined 0.1 percent in July, led by decreases in meats, poultry, and fish (1.2 percent) and fruits and vegetables (1.5 percent). The smaller July rise in nonfood commodities was chiefly due to declines in prices for used cars (2.7 percent) and gasoline and motor oil (0.3 percent). In the services group, the index for household services less rent rose 1.2 percent in July compared to 1.0 percent in June; and the transportation services index rose 0.4 percent compared to 0.8 percent.











CONSUMER PRICE INDEX	JULY 1976	JUNE 1977	JULY 1977
ALL ITEMS, TOTAL			
Index, 1967=100 (Not Seasonally Adjusted)	171.1	181.8	182.6
Percent Change from Previous Month (Seasonally Adjusted)	0.5	0.6	0.4
		Index, 1967=100	
BY COMMODITY AND SERVICE GROUPS			
Food	181.4	193.9	194.0
Meats, Poultry, and Fish	180.7	179.4	177.2
Fruits and Vegetables	169.2	188.1	185.2
Commodities Less Food	156.9	165.1	165.3
Gasoline and Motor Oil	175.8	186.2	185.7
Used Cars	170.7	188.4	183.3
Services	181.1	194.2	195.7
Household Services Less Rent	199.5	213.8	216.3
Transportation Services	175.2	189.4	190.2

Source: Bureau of Labor Statistics

HOUSING STARTS & PERMITS

Private Housing Starts Up 8 Percent From June Pace

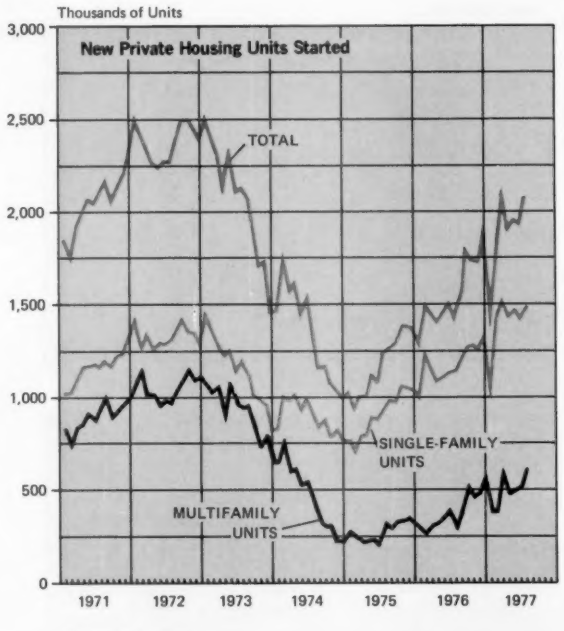
Privately-owned housing starts in July rose to a seasonally-adjusted annual rate of 2,064,000 units, up 46.1 percent from the year-ago rate. Starts of single-family units and multifamily units were up 62,000 and 92,000 units, respectively, from June.

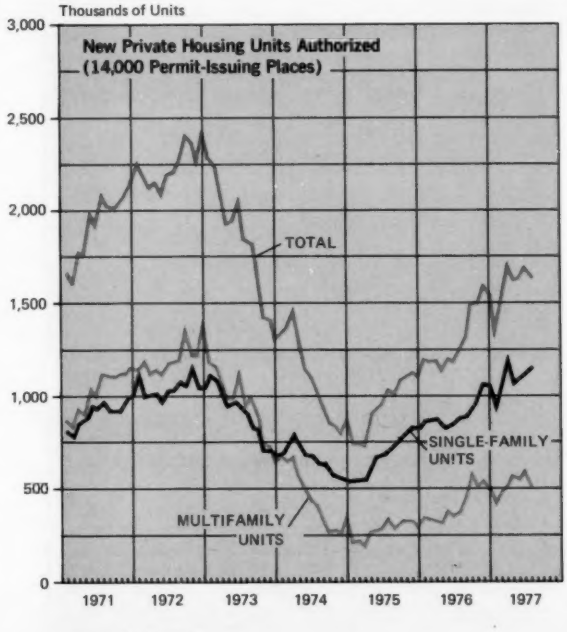
All regions reported increases except the North Central region (down 34,000 units). The West showed the most significant increase (72,000 units), followed by the South's 67,000-unit increase.

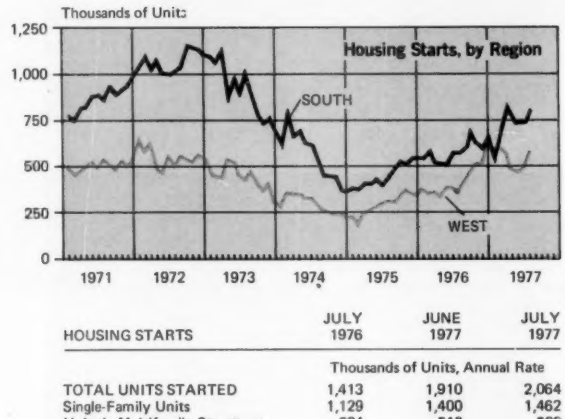
Authorized Permits for Private Housing Dips 29 Percent in July

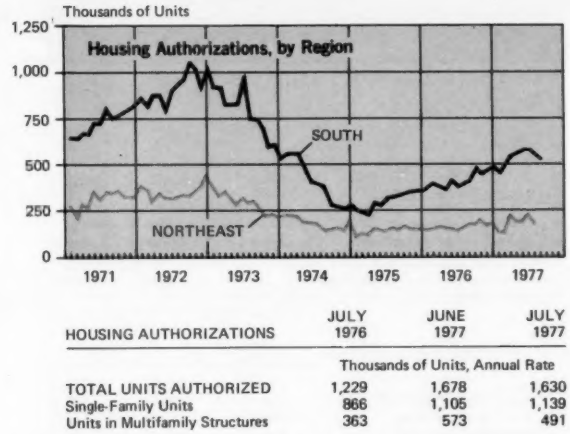
Issuance of building authorizations, an indicator of future construction, dropped to a seasonally-adjusted annual rate of 1,630,000 units in July in the 14,000 permit-issuing places. Permits for single-family units increased 34,000 units, which was more than offset by an 82,000-unit decline in multifamily units.

The Northeast and South reported declines of 49,000 units and 25,000 units, respectively. The North Central and West reported increases totaling 26,000 units.









HOUSING STARTS	JULY 1976	JUNE 1977	JULY 1977
	Thousands of Units, Annual Rate		
TOTAL UNITS STARTED	1,413	1,910	2,064
Single-Family Units	1,129	1,400	1,462
Units in Multifamily Structures	284	510	602
BY REGION			
Northeast	144	189	238
North Central	366	519	485
South	560	726	793
West	343	476	548

HOUSING AUTHORIZATIONS	JULY 1976	JUNE 1977	JULY 1977
	Thousands of Units, Annual Rate		
TOTAL UNITS AUTHORIZED	1,229	1,678	1,630
Single-Family Units	866	1,105	1,139
Units in Multifamily Structures	363	573	491
BY REGION			
Northeast	146	219	170
North Central	297	388	397
South	389	563	538
West	397	508	525

Source: Bureau of the Census

Recreation & Business THE AMERICAN CONNECTION

This article was drawn from a soon-to-be-released study by Elizabeth Owen, an industry analyst with Commerce's Office of Business Research and Analysis.

Relaxation may be America's most serious business. Expenditures on recreation goods and services in the United States are estimated to far exceed the nation's annual outlays for its defense needs or home construction. A recent estimate reported that $146.5 billion was spent on recreational products and activities in the U.S. in 1976—close to 7 percent of the gross national product—and that the total will increase to $160 billion in 1977. This would almost triple the $58.3 billion spent as recently as 1965.

The money is spent on all forms of leisure pursuits, ranging from admission to movies and sporting events, through phonograph records, sporting goods, vacation homes, ski lift tickets, to all the expenses associated with travel for pleasure.

Americans' growing preoccupation with outdoor recreation is in evidence everywhere. New housing developments and apartment complexes feature an increasing number of recreational facilities. Television commercials sell their products with athletes or leisure activity background. Overnight, the recreation vehicle has become a commonplace on the nation's highways.

What are the factors that have encouraged this development of recreation markets? It boils down to the fact that people have more leisure time and more money to spend on pleasure. The workweek itself is not shorter, having stayed fairly consistent at about 40 hours since the end of World War II. It is the work-year that has shrunk, due to longer vacations and more holidays. The average "leisure year" (or time available for recreation) is 123 days long—one third of the total year. This leisure year offers significant opportunities for outdoor recreation—50 weekends (seven of them three days long) and a vacation period averaging 16 days.

This abundance of leisure has spread to every economic and educational strata of American society. A secretary may enjoy a vacation equivalent in length to that of her boss; vacation time is often based on length of service rather than rank or position.

While any further increase in total leisure hours is likely to be minimal, some further gains may be created by reshuffling working time, such as the four-day workweek (ten hours per day). Although currently still in the experimental stage, it may well become widespread by the end of the decade. The major benefit for workers who participate in a four-day workweek has been the concentration of leisure hours into an additional day in each weekend.

Another alternative method being used to increase time available for leisure activities is Flexitime, which allows workers to start and finish work at their discretion as long as they complete the total number of hours required for a given pay period.

Reflecting the growth of leisure time and activities, most Americans are adopting an increasingly casual lifestyle. Jeans have become a major apparel influence and jogging suits are worn to the grocery store as well as to the playing fields. Leisure concepts are influencing styles of furniture (fun-pit modular seating), clothing (designer-wear copying outdoor-wear) and entertaining (fondue parties rather than formal sit-down dinners).

Not long ago the average worker looked forward to relaxing at home after a long day of hard physical labor. But now, idle, do-nothing leisure time is no longer considered desirable—participation in outdoor sports is now the goal for many Americans who are desk-bound during the week.

With so much time and energy involved in recreational activities, informality and minimum expenditure of time are stressed with other activities, such as home maintenance, cooking or yard work. A favored theme for advertising new products is to stress their time-saving virtues.

This abundance of leisure has spread to all economic and educational strata of American society.

GETTING AWAY—Heftier paychecks and more free time to spend them have created an entirely new U.S. industry devoted to recreation. Millions of Americans are now doing things—such as whitewater rafting and camping out—which would never have occurred to them a generation ago.

On the Federal Government level alone, more than 100 agencies, boards and commissions have an influence on recreational supply and demand. Within the private sector the development and marketing activities of thousands of firms, by stimulating people's recreational desires, are constantly creating new pressures on all public agencies to expand recreational facilities and services. As a result, publicly-subsidized camping, skiing, hunting, fishing, golf and tennis have developed and continue to expand.

Some feel that this public subsidization of recreation facilities and services is hurting the private sector. Operators of private facilities complain that governmental recreation planning has frequently overlooked the presence of the private sector and failed to consider the adverse impact of governmental actions.

Economic recreation research data is scarce in both the public and private sectors, but governmental recreation agencies are attempting to correct this situation. The U.S. Forest Service is developing a system of national outdoor trend indicators which could help identify needs for new public recreation programs while also providing valuable insights for private business opportunity. These indicators could: (1) point to trends in types, quality and quantity of outdoor recreation experiences; (2) measure the impact of outdoor recreation on regional economies or the national economy; and (3) monitor any cyclical activity in recreation. The lack of such research in the past has led to several instances, most notably downhill skiing and tennis, in which manufacturers, retailers or facility operators overproduced or over-invested in unrealistic anticipation that their particular sport would continue to grow at a steady upward rate.

... lack of adequate pre-investment planning and a high failure rate have combined to make it difficult to obtain financing for recreational projects.

Because private investors frequently neglect to measure demand and profit potential before starting a new recreation venture, the rate of failure is higher than in many other small businesses (over 90 percent of all recreation ventures are small businesses). This lack of adequate pre-investment planning and a high failure rate have combined to make it difficult to obtain financing for recreational projects.

Despite the smallness of individual firms, it is clear that the various recreation industries—and all the products and services that they offer—are big business. It is not unrealistic to assume that every individual—regardless of age or sex—is a potential customer for recreation goods and services. The 45 percent of American adults who never exercise (according to the President's Council on Physical Fitness and Sports) are the single greatest untapped market, and prospects are good for increased sales to those already participating in sports.

A doubling of leisure activity expenditures can be expected every eight or nine years, based on past trends.

Sports equipment sales were estimated at $11.9 billion in 1976—up 12 percent from $10.5 billion in 1975. The sporting goods market is expected to continue its strong growth during the coming decade, with sales reaching $20 billion by 1985.

Product sales, however, are only part of the story. There are also fees charged for the use of facilities—such as tennis, golf and skiing—and this is a recurring expense.

Additional recreational services are provided by equipment repair shops, facilities construction, management consulting firms, sports instruction by professionals, and value added in the distribution and retailing of sports equipment and apparel.

The only significant trouble spot in the leisure spending field is in cottages, second or vacation homes and lots—a $300 million per year market. In contrast to the healthy gains in most segments of the leisure market, sales of vacation homes and lots have slowed considerably. The second-home market has felt more than most the impact of the 1974 recession and repercussions from activities of some unsavory developers in the 1970s.

The sports projected to have the highest growth rates in 1977 are tennis, sky diving and scuba diving at 20 percent, and water skiing at 19 percent.

For the future, continued popularity in leisure sports, especially the more active, such as racquet games, should provide the basis for stable, moderate growth. The 11 percent annual rate of sales that the industry apparently has enjoyed for the past fifteen

years will range anywhere from 8 to 12 percent in the coming decade, depending on the sport.

The coming shift in age distribution—more babies, fewer teenagers, far more young adults, fewer middle-aged citizens, and many more senior citizens —will most assuredly shift current sports emphasis. For example, school team sales are apparently already decreasing, reflecting a decreasing number of teenagers. Greater longevity, improved health care, and increasing numbers of people on adequate retirement plans strongly suggest a very healthy recreation market for senior citizens.

An increasing number of people are finding full and part-time employment opportunities in recreation-oriented businesses. The private sector includes approximately five million recreational jobs. As more people take up sports, there is a growing demand for profesional sports instruction. Tennis is the best example of this trend—many people are finding permanent, part-time or seasonal employment as tennis instructors.

Others find positions as: facilities managers, sports instructors, marina operators, maintenance personnel, retail sales, equipment repair, equipment rentals, tour operators, industrial recreation program administrators, and many others.

An estimated 80-85,000 people also find employment in federal, state and municipal public recreation programs, all of which require managers, planners, instructors and maintenance professionals.

Commerce's Bureau of Economic Analysis predicts sharp increases in federal grants designed to stimulate employment and support specific kinds of new construction with strong emphasis on recreational facilities. Funding is going to such activities as a multi-million dollar grant for sports facilities for the 1980 Winter Olympics at Lake Placid, N.Y.; construction of a freshwater lake/reservoir in Illinois also encompassing designs for multiple recreation use; and grants to various localities for the construction of tennis courts, inner-city recreation centers, and bicycle trails over unused railroad beds.

Complementary industries

Few industries have as many areas of mutual interest and benefit as the travel and recreation industries. Carriers provide the means, and recreation activities (golf, tennis, skiing or sailing) induce people to travel to a particular place. Manufacturers of leisure-time products participate by providing the sports equipment.

The concept of the "active life" is expected to enjoy even greater appeal. Improved education and the desire to improve physical fitness will continue to propel Americans toward participant sports. Thus, an increasing number of people are taking vacations with a specific athletic purpose.

For example, in 1975 some 12 million people played golf, tennis or skiied while on vacation or taking a business trip. Of these, half took the trip for the primary purpose of engaging in a sport. Millions of others took trips for the purpose of fishing, boating and other water sports.

In the last several years resort-type properties have been the star performers of the lodging industry. But even the non-resort type of hotels and motels are beginning to share in the pleasure travel market. In the last several years, pleasure travel has been increasing (it now provides at least 30-35 percent of the receipts of the lodging market). Business travel, long the mainstay of the industry, has increased more slowly than pleasure travel as one-day sales calls have become more frequent.

As a result, the market with the greatest growth potential for the hotel/motel industry seems to be the pleasure travel market. Many operators are beginning to add to their properties such features as athletic and health club facilities, tennis and handball courts, electronic game centers, and tie-in arrangements with nearby golf courses or ski areas.

Package plans that cover meals, transportation, lodging costs and sports admission fees or equipment rentals for one price are becoming extremely popular. Winter ski areas that also offer golf courses, tennis courts or horseback riding the balance of the year have been the most extensive users of such package plans.

The introduction of new, more economical types of air charters in the mid-1970s and the elimination of many restrictions by the Civil Aeronautics Board on air charters has also stimulated consumer interest.

To further develop this trend, Commerce's United States Travel Service was allocated funds in 1975 to begin a domestic tourism promotion program in ad-

The only significant trouble spot in the leisure spending field is in cottages, vacation homes and lots—a $300 million per year market.

DEMOGRAPHIC PROSPECT—As the children of the Post-World War II baby boom move into their top earning and buying years, the outlook for the recreation industry is for continued strong growth. Many more retired workers now have ample pensions, making them able to take a much more active part in the leisure revolution.

TOP MARKET—Reflecting their recent gains in all areas of the society, women represent the top sales potential for sporting equipment. There has been a major expansion in the number of women's athletic teams in industrial and municipal leagues.

dition to its 14-year-old program aimed at attracting foreign visitors to the United States. One of the major marketing points of the new program is an emphasis on the large number of recreational activities available throughout the country.

The increasing number of sports and recreation magazines also reflects the national preoccupation with recreation. Some are escape oriented, but most are practically oriented, appealing to the knowledgeable who want tips on perfecting their skills.

Greatest potential: women

Scales of almost all types of recreational goods and services to women represent an area of the greatest current growth and future potential.

Sales of almost all types of recreational goods and services to women represent an area of the greatest current growth and future potential. A survey by the National Tennis Foundation reported an estimated increase of more than 50 percent in female tennis players from 1973 to 1974. A National Federation of State High School Associations survey shows dramatic increases from 1973 to 1975 in the number of girls participating in golf, skiing and tennis competition between schools.

A major factor contributing to the growth in women's sports participation at the high school and college level has been Title IX of the Education Amendments passed by Congress in 1972. The thrust of Title IX in athletics is that schools receiving any form of federal financial assistance (almost every school in the country) must make athletic equipment, facilities, and opportunities equally available to both men and women. Recently, the total athletic budget for women at the collegiate level was only two percent of the men's budget. As a result of Title IX, the Association of Intercollegiate Athletics for Women believes that women-oriented sports apparel and equipment will be a tremendously expanding market. There has also been a large expansion in the number of women's athletic teams in industrial and municipal recreation programs.

But by far the greater increase in women's sport participation has been on the individual level. While tennis has enjoyed the greatest growth in popularity among women, a 1976 Nielsen survey indicated that 21 million American women fish, up from 9 million in 1970; 1,514,000 women hunt, up from 869,000 in 1970; and 20 percent of the nation's scuba divers are women, up from 5 percent in 1970. There is a small but increasing number of fishing, hunting, and outdoor organizations specifically designed for women.

Still in their infancy, but enjoying a healthy and rapid growth, are women's professional sports.

What makes the women's recreation market of special significance to the private sector is that its potential has barely been tapped.

This positive projection of the women's market for recreational goods and services is underscored by current trends in women's employment and income levels. For the first time in our history, a majority of the women between 18 and 64 are employed. Their purchasing power is increasing not only because of the number who earn independent incomes, but also because women's salary levels are improving.

Good growth prospects

Aided by smaller price gains than in most industries, expenditures for leisure activities are rising even faster than consumer spending as a whole. The surge in the young adult population, which will continue through the decade, bodes well for most of the industry, especially those selling equipment for active sports and outdoor activities like camping.

Most analysts feel positively about the growth of recreation markets because the prime market for active sports are families headed by persons in the 25 through 34 age group. This group is more than 50 percent larger than a decade ago, and is expected to increase by another 35 percent during the next ten years.

Another demographic impact on the recreation industry is where people will be living in the future. There is already a definite shift of the U.S. population to the South and West—the Sunbelt. In the next 13 years the South is expected to increase its population by 20 percent, the Mountain States by 24 percent, the Southwest by 25 percent and the West by 18 percent. At the same time, the large population centers in the East and Midwest will be growing more slowly and even shrinking.

People tend to be more recreationally active in southern and western areas where the climate is more conducive to outdoor recreation, and in nonmetropolitan areas where the land area needed for recreation is more abundant and accessible.

These trends all point to excellent growth potential for industries that cater to Americans' rapidly expanding interest in recreation. A continuation can be expected in the growth trends for sporting goods, whose sales are generally easier to measure than receipts of service industries. But the potential for expanded recreational services should not be overlooked.

Recreational service companies—many of them new and small businesses—offer the creative entrepreneur an excellent opportunity to capitalize on the exploding demand for recreational activities.

U.S. Business Prepares For Its Five-Year 'Physical'

RESULTS OF ECONOMIC CENSUS TO PROVIDE DETAILED PICTURE OF U.S. ECONOMY; ACCURATE DATA ESSENTIAL

It's time once again for U.S. business to sit down and count itself.

Every five years, Commerce's Bureau of the Census takes a series of canvasses known as the Economic Census.

They cover manufacturing; retail and wholesale trade; service industries; mineral industries; construction industries, and transportation.

The results are a highly detailed blueprint of the nation's economy.

"The 1977 Economic Census will not only provide the government with guidance in economic decision-making that benefits the business community; its results also are important to business people in other ways," says Commerce Secretary Juanita M. Kreps. "Resourceful companies can use the data to improve distribution and inventory control, measure market penetration, determine the location of new facilities, make more accurate forecasts, and employ the information in a number of other profitable ways."

The Census Bureau has reduced the number of firms which will be directly involved in this year's count, in order to keep paperwork to a minimum. The 2.3 million largest firms in the nation will be mailed questionnaires, but only a small number of the remaining 3 million smaller ones will be asked to fill them out, with information about these smaller firms obtained primarily from information already collected by other government agencies.

The law requires firms receiving the questionnaires to fill them out, but also insists that information about individual firms be kept confidential.

"How successful we are in developing this national economic profile depends to a large degree on how well the business community understands the value of the data that it will contribute. It is the only source we have to develop a meaningful picture of economic activity in the highly detailed form that is necessary. The accuracy of this detailed portrait depends entirely on the accuracy and completeness of the data supplied by business people," the Secretary said.

The 1977 censuses have some new reporting categories specifically designed to improve GNP estimates. The Census of Selected Service Industries is being expanded to provide—for the first time—data in the health field on hospitals and doctor and nursing care; on membership organizations such as professional associations and fraternal orders; on private educational services ranging from elementary schools to colleges and universities; on such social services as adoption homes, day care centers, and job counseling, and on services provided by accountants, auditing firms and the like.

Secretary Kreps emphasized that the information being furnished is protected by law. "Title 13 of the U.S. Code is very precise in requiring that information obtained from any individual or business be used only for statstical purposes. It cannot be used for taxation, for investigation or regulation, and the completed forms are not available to anyone other than sworn employees of the Census Bureau."

As a further protection, the law states that the data must be published in a form that will not identify any individual, any single activity, or any establishment. The Census Bureau's record, which dates back to the start of economic census taking in 1810, is unblemished. There has never been a substantiated claim under the law that the Census Bureau has made individual information available outside the Bureau. Or that any information has been used for other than authorized purposes.

From personal experience

"I personally learned the value of data from the economic censuses by working with them in private industry while doing economic research and market analysis," said Census Bureau Director Manuel D. Plotkin. "Unfortunately, I also became aware that not everyone in my own industry recognized the need for these data, particularly those who filled out the forms but did not use the data themselves."

The forms will be mailed out at the end of December to firms in the following industries: mining, including coal, oil and gas extraction; manufacturers; retail and wholesale trade; service trades; and construction. Census is asking that the forms be returned by February 15.

"We encourage firms to return the forms earlier if they can," says Plotkin, "to speed up processing and reduce follow-up costs." Once the forms are returned, the data will be computerized, edited for consistency, tabulated and reviewed, and prepared for publication. This of course is time-consuming, but Plotkin expects to begin publishing preliminary data by the end of 1978. The final reports will begin coming out in the Spring of 1979, and most reports should be available by the end of that year.

This would be considerably faster than the 1972 census results were published.

Take special requests

Additional tabulations will be available on microfiche and computer tapes, and Census is happy to provide special tabulations on request, at cost.

Each firm that receives a form will be asked to answer certain general questions, including: the kind of business and its location; type of ownership; dollar volume of business in 1977; number of employees; and total payroll. Other questions will seek information on the characteristics of each specific industry.

The Bureau will accept reasonable estimates if a firm's records are incomplete or unavailable.

The content of merchandise lines and product lines asked on the questionnaires is sent to trade associations and other representatives of the concerned industries for their review and comment.

Then, the final version of the report forms is cleared with the Office of Management and Budget which is responsible for making certain that government surveys do not duplicate data available elsewhere and are needed by the government and private industry.

The average time for a business establishment to complete its report is about one hour.

BUSINESS HOLDS KEY TO SOLVING CITY PROBLEMS, HARMAN TELLS MAYORS

Solving the problems of the cities is the primary challenge for solving the problems of the world.

This is the message that Under Secretary of Commerce Sidney Harman brought to the Japan-American Conference of Mayors and Chamber of Commerce Presidents in Seattle.

"For business," he said, "the modern metropolis provides a range of specialized skills and services unobtainable anywhere else. Business can draw on a pool of talent in management, law, accounting, marketing, science, and technology. And as a hub of transportation and communications, it is unequalled. Finally, and especially important today, the city is probably the most efficient energy conservation device ever created."

"The city isn't just a geographical location on the map, or a political jurisdiction, or an economic entity," Harman said. "It is above all an idea. It is an idea designed to test the limits of man's capacity for cooperation. It is the training ground for the world at large. Man will succeed here or he won't succeed at all. If he can't make the city work, he can't make the world work."

In searching for solutions to city problems, Harman said, "we are seeking to ensure the survival of civilization itself, the survival of all that man has achieved in his long, painful climb from a brutish existence ruled by the tooth and the claw to an exalted state exemplified by love for his fellow man."

He told the conference that in focusing on business-government cooperation, they were exploring one of the most hopeful ways of accomplishing this purpose.

"Government," he said, "may occupy the vantage point that enables it to get the best overview, to set priorities, and devise balanced solutions. But only business has the managerial ability to assemble the manpower, materials, capital, science and technology required to get the job done. Together, they can achieve just about anything they want to.

"Most important, the cooperation developed here can be carried forward to the larger world as governments work with the great multinational corporations in efforts to raise the living standards of people everywhere. Just as the city cannot live in peace with affluence on one side of the street and abject poverty on the other, neither can the world, though the division be an ocean."

Harman pointed out that in the United States 75 percent of the people live on only 1.5 percent of the land. Yet the present size of cities, he said, is nothing compared to what is in prospect.

Explaining that what has been called the megalopolis lies ahead, he said that by the year 2000 there will be four galactic clusters of cities: from Boston to Washington; Chicago to Pittsburgh; San Francisco to San Diego; and Florida's East Coast from Jacksonville to Miami.

"Why don't we conclude that the city is dead as a viable place to live and work," he said, "that it can never be revived, that its problems can only get worse, and that the only thing to do is abandon it?"

In answer to this question, he commented that for thousands of years the city has been the world's visible symbol of wealth and power, that it has been the center of art, culture, commerce, finance, science, industry and government, that for residents it has been a means of exchanging ideas and experiences with people, that it has provided consumers with a greater freedom of choice in products, and workers with a wider choice of occupations.

"We know that if we can't learn to live together in the city, if we can't learn to protect the city's environment, if we can't discover how to provide a decent standard of living for every city resident, if we can't provide for their security, if business and government can't develop an effective partnership to help solve the city's problems, if we can't learn to do all these things in the city, what hope is there for the world? What hope is there that we can ever achieve peace and prosperity for the world if we can't do it for the city? . . . It isn't the cities that are the dinosaurs of the future. We are."

Northeast Seeks Means To Keep Industry Home

What does the Northeast have to do in order to get its industries to stay put?

Legislative proposals to help raise venture capital for economic growth in the Northeastern States are discussed in a report published by Commerce's Economic Development Administration.

The report contains discussion papers presented at a February conference of state and local officials and representatives of the nation's financial community in Boston.

Entitled *The Northeast—Managing a Way Out, Legislative Actions For Survival in the Credit Markets*, the report stresses the need for northeastern communities to modernize and expand public facilities in order to halt the departure of industry. The reasons for the loss of the area's textile plants are analyzed by comparing the services needed by the plants with those offered by the region's communities.

Copies of the report are available from Commerce's National Technical Information Service, Springfield, Va. 22161. Refer to PB-270 118.

RETAILERS MAY CUT ENERGY COSTS BY 26% WITH INFRARED "EYE"

Electronic equipment featuring an infrared "eye" that counts shoppers and a computer that controls ventilation is being tested in four Massachusetts retail stores in an effort to save energy and money on utility bills.

Developers of the system estimate that it could save more than 26 percent of the heating and cooling costs by varying the amount of air brought into the stores for ventilation—depending on the number of persons inside.

Building ventilation regulations typically require that specific amounts of outside air be drawn into a commercial building each minute for every person inside. Therefore, the heating, ventilation and air conditioning (HVAC) systems normally operate based on maximum occupancy.

In many buildings, such as retail stores, however, the total number of persons actually inside usually is well below the maximum allowed. Thus, the building's HVAC system is drawing in much more air than is needed. This air must be heated in winter and cooled in summer.

Under the system being tested, tiny detectors at the doors send a harmless, invisible infrared beam across the doorways. When shoppers go in and out, the beam is broken temporarily and the information signaled to a tiny computer which keeps count. The computer in turn regulates the outside air intake based on the count by controlling ventilation dampers.

The 20-month project will evaluate its potential for use in other types of buildings and other parts of the country.

War On Waste Spotlighted At Data Elements Symposium

With the accent on information systems contributing to greater efficiency and elimination of waste, Commerce's National Bureau of Standards (NBS) will hold a Third National Symposium on the Management of Data Elements in Information Processing at its Gaithersburg, Md., headquarters September 28-30. Cosponsor of the Symposium is the American National Standards Institute (ANSI).

Leading topics will range from recommendations of the Commission on Federal Paperwork to standards needs in information systems affecting health care, energy and museum data interchange. Tools for more effective data management—exemplified by data resource directories and data dictionary/directory systems—will be discussed in detail.

For information, contact: Mrs. Hazel McEwen, Institute for Computer Sciences and Technology, National Bureau of Standards, Washington, D.C. 20234 ,(301-921-3157).

Experts Say Atlantic Could Provide Safe Storage Place For Nuclear Wastes

One of the most nagging problems associated with development of nuclear energy—disposing of the highly radioactive wastes which it produces—may be near to solution.

The possibility that radioactive wastes from nuclear power plants could be safely buried in cracks in the Atlantic Ocean floor should be seriously explored, according to two scientists from Commerce's National Oceanic and Atmospheric Administration (NOAA) and Yale University.

As debate over a safe, permanent disposal site continues, radioactive wastes are accumulating in temporary repositories. The search far a safe site is difficult because a place must be found where the wastes can lie undisturbed for as long as 250,000 years. During that enormous span of time, no earthquake may jar them, living creatures cannot be exposed to them, and they must not be carried away by ocean currents or underground streams.

Plutonium sealed in canisters and dropped into fracture zones in the eastern Atlantic, suggest Drs. Peter Rona of NOAA and Karl E. Turekian of Yale, might become buried by sediments. Should the canisters someday leak, the materials inside would be imprisoned by chemical processes in the deep-ocean sediments and waters themselves.

Geophysicist Rona and geochemist Turkenian believe that fracture zones in the eastern Atlantic could be such a place. Though more study is needed, say the two, what scientists now know of the geological, chemical, and oceanographic characteristics of the fractures suggest they might make a safe burial ground.

The parallel fracture zones, deep canyons running for hundreds of miles across the Atlantic basin, slice diagonally through the Mid-Atlantic Ridge, the ocean's central spine where molten material wells up from the earth's interior to form new crust. The largest of these enormous canyons have floors six miles wide and walls one or two miles high, a capacious natural prison. With the exception of an active portion that crosses the central spine of the Mid-Atlantic Ridge, the fracture zones are inactive along most of their length.

Sediment accumulates quickly on the floors of the fractures, according to Turekian and Rona, filtering down particle-by-particle, and is augmented by minor avalanches of sediment from the walls of the fracture. At one site in the Atlantis Fracture Zone, a major fracture in the north Atlantic, radiocarbon dating of sediments indicated that a single avalanche dumped a sediment cover 36 feet deep on the floor. They point out that a sediment layer only three inches thick is enough to isolate the material below from most natural disturbances by organisms at the sediment surface.

Even if radioactive particles did work their way to the sediment surface, they would not rise far into the water column, Rona and Turekian continue. Iron and manganese released from the ocean floor in those regions combine with oxygen in the waters and sink again to the bottom, picking up heavy metals—and, presumably, plutonium—along the way. "The water column as a whole tends to be scavenged of reactive nuclides by particles, and the particles near the bottom are even more effective as scavengers," say the scientists.

Finally, the researchers argue, the Circulation of the Atlantic is such that even if plutonium somehow escaped all these other restraints and worked its way into the water column, it would be a long time before it reached the surface of the ocean, where it could begin to affect humanity. This is especially true of the eastern basin of the ocean, they say.

"The length of time between release of a substance to the ocean bottom in the eastern Atlantic and its arrival at the surface will be one of the longest in the ocean system, perhaps a thousand years. The time required for wandering of a water parcel from the deep ocean bottom to the ocean surface where man's main concern lies, provides an additional barrier should escape from a container, the sediment, and the sediment-water interface take place—all events of low probability."

The eastern basin of the Atlantic, they conclude, would be convenient as well as safe, since "the major producers of radioactive waste in the near future are likely to be from countries around the Atlantic Ocean Basin."

The two emphasize that before any decision to bury nuclear wastes in fracture zones is made, more intensive study of the areas is needed.

Trade Practice Rules For 11 Industries Rescinded

The Federal Trade Commission has rescinded obsolete trade practice rules for the following 11 industries (Date of original promulgation in parentheses):

Commercial dental laboratory (11/4/55);
Frozen food (1/13/56);
Wall coverings (6/30/62);
Manifold business forms (6/30/59);
Wire rope (1/11/63);
Tobacco distributing (6/30/62);
Ribbon (6/30/42);
Hand knitting yarn (6/18/48);
Venetian blinds (6/28/50);
Gladiolus bulb (1/17/52), and
Fountain pens and mechanical pencils (1/28/55).

The Commission noted that rescission of trade practice rules and industry guides does not relieve anyone of duties to comply with laws it administers.

Goal of Performance Improvement Conference: Healthier Bottom Lines

No matter how well a business is doing, there's always room for improvement.

The annual conference of the American Society for Performance Improvement could well have a bottom-line impact on every participating organization.

The conference is scheduled for Oct. 4-5, in the Radisson Ian, Plymouth, Minn.

It will address the problems that confront all managers in maintaining and improving cost-effective operations. It will include "hands-on" working sessions led by people who have successfully improved their own firms' operations.

One executive reports that a workshop at last year's ASPI conference supplied him with material for introducing a program at his company which has resulted in a verifiable return on costs in excess of 100 to 1. He says the potential savings from this program, when fully implemented, are more than $10 million annually.

The subjects to be discussed at this year's meeting include:

- Reviewing programs which have increased productivity, cost effectiveness and motivation;
- Maintaining productivity while complying with affirmative action requirements;
- How communications with school systems can be beneficial in improving operations;
- Labor/management designs for improving quality of work life, and
- Successful programs and philosophies from European nations.

For information contact: Bert Caswell, Honeywell, Inc., Mail Station MN 17-3943, 2600 Ridgway Parkway, Minneapolis, Minn. 55413, (612-378-5720).

Management Consultants' Role, Influence Studied

A new book from Mason Charter Publishers spotlights those who mind other people's business and get paid for it: management consultants. According to its author, Howard J. Klein, they operate in somewhat the manner of a shadow government, making decisions that alter the running of the Fortune 500 companies . . . the firms that change policies in major governmental agencies.

For an overview Klein examines the top five firms. Consultants, he contends, are good for business because they can bring both expertise and objectivity to a problem.

Priced at $8.95, *Other People's Business: A Primer on Management Consultants* is available from Mason Charter Publishers, 641 Lexington Ave., New York 10022.

DEEP SEA MINING IMPACT ON OCEAN SURFACE, DEPTHS UNDER STUDY

Tests will begin late this year in the central Pacific Ocean by four international mining groups to determine the effects of deep sea mining, according to the Environmental Research Laboratories of Commerce's National Oceanic and Atmospheric Administration (NOAA). NOAA scientists will measure the effects of mining on the marine environment.

The first group to field its gear will be Deepsea Ventures, the operational arm of Ocean Mining Associates. Its work will be monitored by NOAA scientists involved in the agency's Deep Ocean Mining Environmental Study. They will use scientific instrumentation on the NOAA research ship *Oceanographer*. Scientists will also be aboard the two mining ships used by Deepsea Ventures.

The mining tests and the environmental study represent for both industry and science the second step in harvesting from the ocean floor the roundish nodules of rock containing high concentrations of iron, manganese, copper and nickel.

While industry has been working to develop techniques for collecting the nodules, NOAA researchers have been engaged in studies of the state of the water, life forms, and sea bed prior to the mining. These studies have centered on three sites in the central Pacific judged to be representative of the range of environmental conditions that mining might affect.

The tests that NOAA scientists will monitor will be of hydraulic systems for mining the nodules. A collector, or dredgehead, will travel along the sea floor, drawing in water, nodules, and whatever else lies in its path.

The system will separate the nodules from the other material, discharging much of the latter near the sea floor while pumping the nodules upward through a pipe to the ship. The remainder of the excess material will be discharged at the sea surface.

Over a 20-day period the scientists will concentrate on the material discharged at the ocean surface. Researchers aboard the mining ships will note how, where, and how fast the material is discharged into the sea, the nature of the discharge, that is, its temperature, salinity, and concentration of solids, and finally what is done with the nodules that are collected or discarded.

On later mining tests, scientists hope to monitor the effects of the dredgehead on the sea floor, and the material discharged into the bottom waters. They want to observe how rapidly the collector moves across the bottom, how its movement clouds the waters, and how deep a scar it leaves. In addition to the observations used to track the surface plume, the scientists will collect bottom samples, and lower underwater cameras to record what happens on the sea floor.

The project is managed by NOAA's Marine Ecosystems Analysis program office through the Pacific Marine Environmental Laboratory, which is part of the Environmental Research Laboratories.

Law Gives New Impetus To Resource Recovery From Nation's Solid Wastes

In a nation which many say is drowning in garbage, some U.S. businesses are discovering how to turn it into gold. And Commerce is helping them to devise the formula.

Systems for recovering metals, glass and energy from solid waste offer important new profit opportunities to business—as a result of the requirements of the Resource Conservation and Recovery Act of 1976.

Under the law, the Commerce Department is responsible for encouraging greater commercialization of proven resource recovery technology by developing specifications for recovered materials, developing markets for their use, and providing forums for the exchange of technical and economic data on resource recovery.

In addition, Commerce is responsible for promoting wider knowledge and use of resource recovery technology. A recently issued bulletin from Commerce's Office of the Ombudsman to a wide variety of firms—ranging from metal foundries to electric utilities—is the first in a series of reports designed to spread knowledge of these techniques.

The bulletin points out that some recovery systems are already operating commercially. In Milwaukee, a private firm takes all the municipal waste and shares its profits from the recovery of glass, metals and energy with the city. In Delaware, another firm recovers and sells metals and also produces a soil conditioner made from solid waste.

Products that have been successfully recovered from such waste include tin, steel, aluminum, glass, compost and fuels in the form of fluff, pellets, dust, fuel oil and gas.

The bulletin says little has been done to create a new machinery for the emerging industry, which so far employs magnets, shredders and pelletizers borrowed from other industrial uses and incorporates them into systems for high-technology resource recovery.

Copies of *Resource Recovery Bulletin 1* are available from the Office of the Ombudsman, U.S. Department of Commerce, Washington, D.C. 20230.

COSTS OF OPERATING INDUSTRIAL POLLUTION DEVICES JUMPED IN '76

Operating costs by U.S. manufacturing concerns for pollution abatement increased sharply in 1976 over the previous year, although capital outlays declined.

Commerce's Bureau of the Census reports that in 1976 manufacturing firms spent $4,510 million for pollution abatement compared to $3,662 million in 1975, an increase of 23 percent. Of the 1976 total, $1,873 million was for air pollution, $1,826 million for water, and $811 million for solid waste.

Meanwhile, in 1976 capital outlays by manufacturing firms for pollution abatement totaled $3,523 million compared to $3,638 million in 1975, a decline of three percent. Of the 1976 total, $1,797 million was spent for air pollution abatement, $1,593 million for water, and $133 million for solid waste.

All industries showed increases in operating costs for pollution abatement in 1976. The petroleum, chemicals, primary metals, and paper groups were tops in this category. Of the $848 million increase over 1975, $651 million was accounted for by these industries.

So far as capital expenditures were concerned, the picture was mixed. The largest declines were: paper industry; from $605 million in 1975 to $487 million in 1976, or 20 percent; petroleum industry, from $556 million to $441 million, or 21 percent.

Of the 19 manufacturing industry groups, ten showed capital outlays increases in 1976. These groups accounted for 43 percent of the total pollution abatement capital expenditures. The largest increase was in the chemicals group, whose capital outlays rose from $780 million to $940 million, or 21 percent.

Renters excluded

Manufacturers of apparel and other textile products were excluded from the survey because they operate primarily in rented quarters. Thus any pollution abatement expenses probably would have been incurred by the landlord and would not be reportable by the manufacturer.

Outlays for noise pollution abatement also were excluded from the survey, as well as outlays for devices on purchased motor vehicles and spending made to improve environmental aesthetics or employee comfort, such as landscaping and air conditioning.

Manufacturers of pollution abatement equipment or materials, such as electrostatic precipitators or desulfurized fuels to be sold to others for pollution abatement purposes, excluded expenses associated with the development and production of these products.

Manufacturing Productivity Up; Nonfarm, Private Sectors Down In Second Quarter

Productivity in the private business sector declined at a seasonally adjusted annual rate of 1.8 percent in the second quarter of 1977, according to the Labor Department's Bureau of Labor Statistics.

This compares with a 6.1 percent increase in the first quarter. The productivity decline reflected a 7.9 percent increase in output and a 9.8 percent rise in hours paid for, the largest quarterly increase in hours since the second quarter of 1959. The increase in hours paid for was reflected in a substantial increase in employment—up 7.6 percent—and average weekly hours—up 2.1 percent.

The private business sector is the broadest quarterly productivity measure published by the Bureau. It reflects changes in the farm sector which do not appear in any other quarterly series. In the second quarter of 1977, a substantial rise in farm hours significantly increased the measure for the private business sector.

In the nonfarm business sector, productivity declined 0.4 percent, compared with a 5 percent rise one quarter earlier. Output increased 7.8 percent while hours paid for rose 8.2 percent over first-quarter levels. This was the largest increase in nonfarm hours since the fourth quarter of 1952. The increase in hours was the result of a 6.6 percent rise in employment and a 1.6 percent rise in average weekly hours.

Second quarter productivity increased 4 percent in manufacturing, compared with two consecutive quarterly declines in the measure. The increase in productivity reflects increases of 14 and 9.6 percent in output and hours, respectively. This was the largest increase in output since the third quarter of 1975 and the biggest increase in hours paid for since the first quarter of 1966.

In durable manufacturing, productivity increased 6.1 percent, compared with declines of 2.4 percent in the two preceding quarters. Output increased 17.5 percent and hours were up 10.7 percent over the preceding quarter.

In the nondurable subsector, productivity increased 2 percent, compared with a 2.2 percent rise the first quarter. The second quarter increase reflected a 10.1 percent rise in output (the largest quarterly rise since the fourth quarter of 1975) and a 7.9 percent increase in hours.

Revised first quarter measures are available for the nonfinancial corporate sector. The revised figures reflect the introduction of changes in the output and compensation measures produced by Commerce's Bureau of Economic Analysis and the most recent labor input levels from the Bureau of Labor Statistics. The revised measures show productivity increased 6 percent during the first quarter, not 2.6 as previously calculated.

The large upward revision primarily reflects a change in the output measure, which showed a rise of 9.4 percent, compared with a 5.7 percent increase computed on the basis of preliminary information.

Revised output and compensation measures back to 1974 were recently made available by the Bureau of Economic Analysis. The largest revisions occurred in the recession year 1974, where the productivity decline was revised to 2.7 percent, rather than the previously reported 3.4 percent drop in the private business sector. A similar revision occurred in the nonfarm business sector. On the other hand, in manufacturing and in nonfinancial corporations, productivity declined more in the revised series than in the preliminary estimates for 1974.

Minority Firm Exhibits Water Purifier At Housewares Show

A water purifier for use in the home was the first product to be exhibited by a minority firm at the National Housewares Manufacturers Association Exposition, held recently in Chicago. The Water Master bacteriostatic filter is produced by KMI (Key Marketing, Inc.) of Marlow Heights, Md.

The product has been selected for promotion by two Commerce agencies—the Office of Minority Business Enterprise, which provides financial and marketing advice to minority-owned firms, and the Office of Export Development. The new joint program is aimed at minority firms interested in and capable of selling their goods and services abroad. OMBE estimates there are 300-400 minority-owned firms turning out exportable products and that about half of these have the capability to become exporters.

Water Master, produced by Dr. Robert F. Key and a partner, features a new filtering process developed for the long-range submarine and space programs. The silver-impregnated carbon process has been extensively tested and certified by the U.S. Environmental Protection Agency, and a patent has been applied for and is pending. Key has found his filter to be highly effective against a variety of water pollutants including water-borne bacteria, hazardous metals and cancer-causing chemicals. The filter's small size makes it usable in motor homes, campers and boats as well as houses and apartments.

Under the team program, the Commerce agencies have contacted more than 160 minority firms, and are presently evaluating the responses. Those judged to be capable of exporting will be introduced to Commerce programs, which include seminars and workshops on exporting designed for minority business owners; individual consultation with Commerce District Office trade specialists; dissemination of overseas market research findings and specific foreign trade leads; help in securing export financing and obtaining overseas agents and distributors; and participation in Commerce-sponsored trade promotion events abroad.

Commerce assisted Key in selecting 10 overseas test markets for the Water Master. If these are successful, then KMI will expand its international sales.

COOL, CLEAR WATER — *Water Master filter was shown at Chicago exposition by its developer, Dr. Robert Key (R.). Dolf Zapfel, of the National Housewares Manufacturers Association, looks on.*

Financial Directory Details Textile, Apparel Companies

The 250-page *Fairchild's Textile and Apparel Financial Directory* includes profiles on more than 325 publicly-owned corporations with important holdings in the textile and/or apparel fields. The profiles detail profit, sales, net worth and dividend ratios, and more than a dozen other financial facts about each company.

If ordered before October 1, the prepublication price is $25. After that, the regular price is $40. The directory can be ordered from Fairchild Books, 7 East 12th St., New York 10003 (212-741-4067).

Reduced Employee Rolls Reflect Growing Financial Problems Of U.S. Cities

The financial problems of the nation's cities are beginning to be reflected in their personnel rolls. Employment by city governments throughout the United States decreased 2.5 percent in the year ending last October.

It was the first decrease in city employment since 1962, Commerce's Bureau of the Census reported.

"We do not provide an analysis of what our survey results indicate, but it is my professional guess that this decrease reflects the effect of the continued financial problems in our large cities." says Census's Alan Stevens.

"Basically, the cities started curtailing their employment even before New York City's financial crisis. We expected our city employment data to show a decline two years ago, but the anticipated drop was offset by hirings financed through the Federal Comprehensive Employment and Training Act of 1973. Now that the impact of the CETA program has leveled off, we are seeing the results of the cities' continued efforts to trim their personnel rolls."

"But not every city is cutting back," Stevens points out. "Many cities in the Sun Belt, cities with less than 100,000 population, and consolidated city-county forms of government, such as Nashville, which may be able to draw on a wider tax base, have generally not begun to reduce their personnel rolls."

Municipal employment totaled 2.4 million in October, down 63,000 from a year earlier. While still increasing, city payrolls for the same period showed their lowest rate of increase since 1962, going up 5 percent to $2.2 billion.

Average monthly earnings of full-time municipal employees (except teachers) in October 1976 were $1,026, a 6.9 percent increase over the previous year. Full-time instructional employees of municipally-operated school systems had average earnings of $1,319 that month, a 6.5 percent gain over October 1975.

Education and police functions accounted for more than one-third of all municipal employment.

Total city government employment doubled between 1946 and 1976, and payrolls went from $206 million to $2.2 billion.

A report on *City Employment in 1976* gives individual data for 388 cities with estimated populations of 50,000 or more in 1973. In October 1976, these cities accounted for 63 percent of all full- and part-time municipal employees. Data are also shown for 22 major urban towns and townships in four states (Connecticut, Massachusetts, New Jersey, and Pennsylvania) where town responsibilities resemble those of cities.

The following table shows the percentage distribution of employment, by function, for all municipalities:

Function	Percent of city government employment
Education	17.1
Police	16.5
Fire protection	8.7
Highways	5.9
Hospitals	5.8
Sanitation, other than sewerage	5.1
Utilities, other than water supply	5.0
General control	4.9
Parks and rec.	4.8
Water supply	4.4
Financial admin.	2.9
Sewerage	2.6
Public welfare	1.9
Housing and urban renewal	1.7
Libraries	1.7
Health	1.7
Correction	0.9
All other functions	7.9

Energy Users Report

One of the most comprehensive energy reports to come out of Washington, *Energy Users Report* consists of a reference file containing basic documents of the energy situation (Presidential statements, legislation, FEA regulations, the energy programs of all the concerned agencies) and weekly updates on happenings in the field.

Subscription information is available from the Bureau of National Affairs, 1231 15th St., N.W., Washington, D.C. 20037 (202-452-4200).

Reaction To Proposed FTC Rule Change Sought

The Federal Trade Commission has extended until September 30 the time for filing comments concerning proposed revisions to its pre-merger notification rules.

The rules would require persons planning certain mergers or acquisitions to submit information so the FTC and the Justice Department can determine whether the merger, if carried out, would violate the antitrust laws.

Comments should be sent to both (1) the Secretary, Federal Trade Commission, Room 172, Washington, D.C. 20580 and (2) the Assistant Attorney General, Antitrust Division, Department of Justice, Room 3214, Washington, D.C. 20530.

The revised rules, which would implement Title II of the Hart-Scott Rodino Antitrust Improvements Act of 1976, were published in the *Federal Register* on August 1.

Product Safety Agency Wants Wider Participation By Business, State Agencies

The Consumer Product Safety Commission (CPSC) is increasing its efforts to reach out to the business community and to state and local entities for assistance in its product safety efforts.

In a recent speech to the 12th Annual Merchandising and Marketing Convention of the National Mass Retailing Institute, Commissioner Barbara H. Franklin called upon business executives to participate actively in the government's regulatory decision-making process.

According to Franklin, they would find it "wiser and cheaper to design and sell safer products or to locate and correct defects early on than to be the defendant in product liability suits, mount expensive recall campaigns and endure the sales-wrecking publicity and weakening of consumer confidence."

Acknowledging that regulatory actions can place a significant burden on some companies, she stated that it is Commission policy to determine the economic effects of its actions, especially the impact on small business.

In another effort to broaden participation, Commission Chairman S. John Byington outlined to the 81st Annual Conference of the Association of Food and Drug Officials (AFDO) several activities being undertaken by the Commission to enhance federal/state cooperation. These include:

- Commissioning qualified employees of state or local agencies as officers of CPSC for the purpose of conducting investigations and inspections;
- Providing states with model legislation and standards for their consideration;
- Maintaining continuous communications with national organizations such as AFDO and involving representatives of these organizations in the Commission's planning process;
- Making available to the states standards and regulations as they are developed so that CPSC may be advised concerning the possible effect on state and local government regulations in time to avoid any problems, and
- Contracting with several states to perform functions in such areas as compliance, information and education, and injury surveillance.

Byington pointed out that several federal agencies have been working together to avoid overlapping and duplicative efforts.

He cited, among other examples, the recent joint effort of the Commission, the Food and Drug Administration and the Environmental Protection Agency to ban nonessential uses of chlorofluorocarbon propellants in aerosols as an example of the potential for cooperative action.

Great Lakes Marine Firefighting Training Facility To Be Located In Toledo

It looks like clear sailing ahead for the marine firefighting training facility for the Great Lakes region, as a result of a recent meeting in Toledo. All interested parties—the Great Lakes Port Authority, the city of Toledo and the regional fire departments—are in agreement on the basic plans. A contractor is at work on preliminary designs; the money to start building the facility is expected to be available October 1.

The meeting was scheduled by Commerce's Maritime Administration as part of its joint participation with the Coast Guard and Commerce's National Fire Prevention and Control Administration in safety related marine training activities. The facility, to be located in the Toledo vicinity, will be specifically designed to train fire personnel serving aboard vessels used in waterborne commerce.

"This program will fulfill a long-standing and ever-increasing need for the capability to conduct training in the field," said Robert J. Blackwell, Assistant Secretary of Commerce for Maritime Affairs. "It is also in keeping with the deep concern that President Carter has expressed over degradation of the marine environment.

"The emphasis at the new firefighting facilities will be on practical training situations where individual proficiency can be demonstrated," Blackwell said. "We hope that the proposed facilities will be developed as a joint effort of industry and all levels of government."

There will be no classroom lectures at the facility. Trainees will be expected to attend up to 24 hours of classroom instruction (depending on their specialties) elsewhere.

A similar facility is planned for the Gulf Coast area, and was discussed at an open meeting scheduled in New Orleans on September 9. These two locations—plus a facility being considered for the West Coast—are being developed in anticipation of U.S. Coast Guard requirements for practical firefighting training for maritime personnel. The Maritime Administration and the Coast Guard cooperate in the qualification of crews for U.S. merchant vessels—training, documenting and licensing.

The Maritime Administration, in conjunction with the Navy's Military Sealift Command, already provides firefighting and damage control training at Earle, N.J., and Treasure Island, San Francisco.

National Fire Conference To Highlight Policy Issues

Policy issues facing fire department administrators and government officials will be the subject at the Third Annual Conference of Commerce's National Fire Prevention and Control Administration, scheduled for October 24-26 in St. Louis. Previous conferences have concentrated on master planning and fire prevention.

The conference will concentrate on six subject areas dealing with policy issues: the built environment, fire prevention, fire suppression, fire protection leadership, overview of policy issues in fire protection, and resolving policy issues (or what to do when you go home).

Topics to be considered include: legislating fire safety through codes, enforcing codes and regulations, labor-management negotiations, prosecuting arson cases and many others.

Following speakers' presentations in each of the subject areas, participants will break up into four workshops relating to individual interests: small cities, medium-size cities, large metropolitan cities or jurisdictions, and communities with volunteer fire departments. Conferees will be encouraged to remain together during lunch and dinner for further opportunities to discuss mutual interests.

The basic objective of the conference is to bring together policy decision-makers such as mayors, councilmen, county supervisors, state legislators, city managers, corporate officers and labor leaders, with members of the fire protection community to communicate on these issues.

Grant To Fund Public Education On Fire Safety

Surveys show a 30 to 70 percent reduction of residential fire-loss when public education programs are used in a community, according to Howard D. Tipton, administrator of Commerce's National Fire Prevention and Control Administration (NFPCA). Tipton announced a $35,000 grant to the International Society of Fire Service Instructors (ISFSI) to plan a comprehensive training program for public fire education specialists.

"In many areas," Tipton said, "fire service personnel lack the skills for planning and implementing such programs. Among the expected benefits of this project is the opportunity for these men and women to learn how to deliver useful and specific fire safety information to the public."

Courses will be developed and tested on some 2,000 fire service employees. The National Fire Academy will use the final course products to instruct fire safety specialists across the country.

INTERPLANETARY VISITOR? — *No, Honeywell fire detector, which is backed up by panel that turns on extinguishers, warns occupants, calls fire department.*

Smoke Detectors Need Help To Save Lives In Fires

More than 10 million smoke detectors will be sold during 1977, according to estimates from Commerce's National Bureau of Standards. Yet the National Fire Prevention and Control Administration (NFPCA), another Commerce agency, has completed a study indicating that owning a smoke detector is no guarantee of escaping death or injury from fire. The NFPCA analyzed residential fire deaths in Maryland during a recent seven-month period and discovered that of 60 people reported killed, five owned smoke detectors.

The NFPCA stresses the necessity of having a total life escape plan. Among the reasons why the victims were not saved despite owning fire detectors:

- Staying in the burning building to call the fire department, rather than escaping first and making the call from a neighbor's;
- Trying to put out the fire rather than escaping and calling the fire department;
- Neglecting to stay down near the floor, where breathable air lasts longer;
- Failing to replace detector batteries periodically, as instructed, and
- Neglecting to install the smoke detector, which was still in its box.

In addition to avoiding all these pitfalls, the NFPCA advises everyone to have a rope or chain ladder available for escape from second or third stories, and to choose a place outside the house for the family to meet in the event of a fire, so it can be easily determined if everyone has escaped.

Grant Helps Business And Pleasure Blend On Energy-Impacted Louisiana Coast

"There's not enough water here for the two of us," energy and pleasure industry spokesmen in Grand Isle, Louisiana, used to tell each other.

They don't talk that way any more. A grant of almost $800,000 to the State of Louisiana—the first construction grant to be made under the Coastal Energy Impact Program—will provide a critically-needed water supply facility on Grand Isle in Jefferson Parish.

The grant was made by Commerce's National Oceanic and Atmospheric Administration through its Office of Coastal Zone Management (OCZM). "Grande Isle is both an extremely appealing recreational spot and an important base for energy production," said Robert W. Knecht, OCZM Director. "The island's water supply is adequate to handle the town's permanent residents, but cannot meet the increased recreational demand because of the coastal energy activity. This situation is just the sort that the Coastal Energy Impact Program was designed to alleviate."

Grand Isle is the base for several oil companies' operations and also attracts visitors, fishermen, campers, and beachgoers by the thousands during weekends and in the summer. It is one of the few places in the state where surf bathing is possible throughout the year.

Site of much of the recreational activity is a 100-acre state park visited by 380,000 persons in 1976. Frequently during the year, the park had to be closed because of a water shortage, and the Louisiana Department of Public Works has postponed construction of two additional bath houses there because of insufficient water supply.

The new water system will provide an adequate supply for present and anticipated needs, and will enable full recreational facilities to be restored. Under the grant, land will be acquired, a million-gallon ground storage tank erected, and pumping, piping, and chlorinating facilities installed.

The Coastal Energy Impact Program was created by 1976 amendments to the Coastal Zone Management Act of 1972. Its purpose is to help states and communities deal with the effects of coastal energy development. It includes credit assistance, planning grants, environmental grants, and formula grants.

Other recent coastal management awards made by NOAA included:

—$542,984 to support the continued development of a coastal management program in North Carolina. The State Department of Natural and Economic Development will administer the grant and an additional $135,747 in matching funds provided by the State. The funding will support activities in land use planning, and planning, implementation, and enforcement in areas of environmental concern.

—$624,000 to assist Rhode Island in continuing development of its coastal management plan. Rhode Island began developing its program in 1973. When completed it will serve as a guide for selecting suitable sites for locating coastal activities, and for relieving pressures exerted on the coast by various competing interests.

—$230,100 to enable Massachusetts to complete development of a coastal management program. An important aspect of the program will be a demonstration project, jointly funded by NOAA and the U.S. Department of Housing and Urban Development, to establish a model relationship among various levels of government in determining the onshore needs of energy development on the Georges Bank.

—$216,000 to Minnesota to continue its program for management of its coastal areas along Lake Superior. The program is aimed at reducing destruction of coastal ecosystems by flooding, erosion, dredging, and the like, while promoting rational use of the coastal area for numerous competing activities.

WATCHING THE COASTLINE—*Surf fishing at Cape Hatteras on North Carolina's Outer Banks. North Carolina is one of five states receiving recent grants for coastal management from Commerce's National Oceanic and Atmospheric Administration.*

North Carolina's Fishing Industry Gets Financial Boost

North Carolina's commercial fishing industry may steer clear of the financial shoals with the help of Commerce's Economic Development Administration.

Secretary of Commerce Juanita M. Kreps has announced a $3 million EDA grant to help establish an industrial seafood park at Wanchese Harbor on North Carolina's Roanoke Island.

The state's Department of Natural and Economic Resources is conducting the adjustment program to protect some 5,000 jobs which depend on the state's commercial fishing industry.

These jobs are threatened by environmental, health and safety regulations facing many of the small processing plants. The Wanchese Harbor program will provide sites—with waste-treatment facilities—for private firms to process, store and distribute seafood.

The program also includes the development of a basin to serve as a home port for commercial fishing fleets and a harbor of refuge for up to 180 vessels.

The Wanchese Harbor project is expected to revitalize the region's fishing industry and enable it to share in the anticipated growth in connection with the extension of offshore fishing rights to 200 miles.

The program is aimed at:

—Eliminating problems the industry experiences from unreliable markets and crowded harbors which provide unsafe refuge from storms;

—Developing a major commercial seafood handling, processing, storage and distribution port in an economically lagging area, and

—Enabling the industry to meet environmental, health and safety regulations.

In addition to strengthening the state's commercial fishing industry, the Roanoke Island project is expected to stimulate long-range economic growth in a four-county area marked by high unemployment and low family incomes.

World Tourism Chief Calls For Two-Way Travel Between All Countries

Calling tourism not frivolous or marginal, but one of the most important human activities, Robert Lonati, Secretary General of the World Tourism Organization (WTO), stressed the need for two-way travel with all countries in a recent visit to Commerce's United States Travel Service (USTS).

"WTO must support two-way travel. We are against any measure which limits human rights. We believe in freedom of movement. We have had many talks with Communist countries, and we defend the UN Charter of Human Rights. Certain ideological barriers to two-way travel still exist, but they are disappearing. The USSR is now more open to foreign tourism than it was years ago. Now there are hotels, and travelers can rent cars.

"But citizens of the Communist countries need foreign currency to travel abroad, because their domestic currencies are not exchangeable. There must be a priority within those countries on the use of foreign currency."

The World Tourism Organization, headquartered in Madrid, is an intergovernmental technical body dealing with all aspects of tourism on a worldwide basis. It provides an international forum where government and private tourism officials can discuss problems and exchange ideas. WTO works in cooperation with all international organizations, the UN in particular, as well as with commercial and other bodies involved in tourism.

In 1975 it grew out of the International Union of Official Travel Organizations, a nongovernmental body first set up in the Netherlands fifty years ago to promote tourism for the economic, social and cultural advancement of all countries. The swift expansion of travel in the intervening years had created the need for a world body able to deal with tourism problems at government level.

Lonati spoke of WTO's efforts to attract more members. Although 100 countries presently belong, the United Kingdom, Canada, Australia and the Scandinavian countries, among others, are not members.

Pointing out that tourism doesn't attract the attention and publicity of other issues, such as ecology or crime, he admitted that when tourism is going well, it doesn't get headlines. Only bad news, like hijacking or polluted water supply, is newsworthy. Yet, there are one billion tourism arrivals worldwide each year.

"Tourism can improve the quality of life," Lonati said. "A government should be as responsible for the vacations of its citizens as it is for their health and defense, for example.

"For years we have talked only about international tourism. Now, we must begin to realize the increased importance of national tourism. Countries, including the developing ones, must want their own citizens to enjoy the benefits of paid holidays.

"Until now, tourism has meant luxury hotels. But now, countries must ask themselves what they can do for the poor people, for their local people. Tourism was always thought of as a source of foreign currency. There was too much emphasis on foreign exchange and on pure profit. This created a certain distortion.

"Tourism, we are now beginning to realize, also produces social, health, cultural and political benefits. And it helps dissipate the stereotypes that we live by."

Lonati praised the United States for undertaking the National Tourism Policy Study now being conducted by the Senate.

"This study will be a source of inspiration to many countries which are now very narrow in their approach, i.e., heavily concentrated on the economics of tourism. This study will serve as an example of how a government decides to measure the impact of tourism on all segments of the national life and what it intends to do to facilitate this evolution. Many countries are anxious to see this study. WTO hopes to popularize the report, especially its methodology."

Lonati also lauded the proposal of Assistant Secretary of Commerce for Tourism Fabian Chavez for a code of tourism conduct. The code has been placed on the agenda for the 1980 world policy-making conference to be held in Manila.

Calendar Of Business Events

Sept. 19-23—Des Plaines, Ill.—Computer Automated Process Planning, Ramada O'Hare Inn. Contact: Bill Yeates, CAPP Course, Society of Manufacturing Engineers, P.O. Box 930, Dearborn, Mich. 48128 (313-271-1500 ext. 312).

Sept. 20-22—Hartford—Product Engineering Conference, Hartford Hilton Hotel. Contact: Christine Park, Society of Manufacturing Engineers, see address above.

Sept. 20-22—Chicago—Coolants and Lubricants clinic, Sheraton O'Hare. Contact: Carl Skrzynski, Society of Manufacturing Engineers, see address above.

Sept. 21-23—Gaithersburg, Md. — Roofing Technology Symposium, National Bureau of Standards. Contact: Robert Mathey, B348, Building Research Bldg., NBS, Washington, D.C. 20234 (301-921-3407).

Sept. 23—Bethesda, Md.—Federal Procurement Conference, Bethesda Holiday Inn. Sponsor: U.S. Rep. Newton I. Steers, Jr. Contact: David O'Bryon, c/o Rep. Steers, Room 413, Wheaton Plaza North, Wheaton, Md. 20902 (301-427-7548).

Sept. 26-27 — Philadelphia — Predictive Maintenance Seminar, Drexel University. Contact: Drexel U., 32nd & Chestnut Sts., Philadelphia, Pa. 19104 (215-895-2154).

Sept. 26-27 — Los Angeles — Termination for Convenience & Default Course, University Hilton Hotel. Contact: American Graduate University/Procurement Assoc., Inc., 733 N. Dodsworth Ave., Covina, Calif. 91724 (213-331-5484).

Sept. 26-28 — Chicago — Fundamentals of Data Processing for the Non-Data Processing Executive, AMA Management Ctr. Contact: American Management Associations, 135 W. 50th St., New York 10020 (212-586-8100).

Sept. 26-29—Minneapolis—Managing People, Time & Money; Tax Planning; and Design/Build/Lease seminars for the construction industry, Radisson Downtown Hotel. Contact: Group Communications, 6101 SW Freeway, Suite 401, Houston, Tex. 77057 (713-664-8818).

Sept. 27—Chattanooga, Tenn.—Energy Efficiency Sharing Workshop, Chattanooga Area Chamber of Commerce. Contact: Commerce Memphis District Office.

Sept. 27-30—Atlanta—American Apparel Mfrs. Assn. Convention/Bobbin Show, Georgia World Congress Ctr. Contact: AAMA, 1611 N. Kent St., Suite 800, Arlington, Va. 22209 (703-524-1864).

Sept. 28—Memphis—Energy Efficiency Sharing Workshop, Memphis Area Chamber of Commerce. Contact: Commerce Memphis District Office.

Sept. 28-30—Dallas—Semi-Annual Dallas Toy Show, Dallas Market Center. Contact: Dallas Mkt. Ctr., 2100 Stemmons Freeway, Dallas 75207 (214-748-6832).

Sept. 28-30—Philadelphia—Finance & Accounting for Non-Financial Managers, Drexel University. Contact: Drexel U., see address above.

Sept. 28-30 — Gaithersburg, Md. — Data Element Management Symposium, National Bureau of Standards. Contact: Hazel McEwen, B226, Technology Bldg., NBS, Washington, D.C. 20234 (301-921-3157).

Sept. 28-Oct. 1—Norfolk, Va.—National Business League Annual Convention, OMNI Int'l Hotel. Contact: NBL, 4324 Georgia Ave. N.W., Washington, D.C. 20011 (202-726-6200).

Sept. 29—Louisville—Energy Efficiency Sharing Workshop, Louisville Gas & Electric Co. Contact: Commerce Memphis District Office.

KEY BUSINESS INDICATORS

QUARTERLY SERIES

Indicators	IV Qr76	I Qr77	II Qr77	Percent Change From Year Ago
GROSS NATIONAL PRODUCT (bil.$) annual rate	1,755.4	1,810.8	1,869.7	10.5
REAL GNP (% change) annual rate	1.2	7.5	6.1	4.6
CORPORATE PROFITS [1] (bil.$) annual rate	123.1	125.4	139.7	8.1
OUTPUT PER HOUR, NONFARM BUSINESS SECTOR [3] (% change) annual rate	—1.8	5.0	0.4	1.6
UNIT LABOR COST [3] (% change) annual rate	8.6	5.3	7.7	6.9
PERSONAL INCOME (bil.$) annual rate	1,432.2	1,476.8	1,517.2	11.0
REAL DISPOSABLE PERSONAL INCOME (% change) annual rate	4.9	3.1	7.3	4.1

MONTHLY SERIES

Indicators	June	July	August	Percent Change From Year Ago
RETAIL SALES (bil.$)	58.4	58.7	—	9.3
CONSUMER PRICE INDEX [3] (% change)	0.6	0.4	—	6.7
WHOLESALE PRICE INDEX [3] (% change)				
Finished Goods	0.1	0.0	0.1	6.6
Consumer	—0.2	—0.1	—0.1	6.5
Producer	0.4	0.4	0.4	6.7
Farm Products, Processed Foods and Feeds	—3.6	—2.1	—2.1	1.4
Industrial Commodities	0.3	0.5	0.5	7.1
Crude Materials	—1.6	0	1.9	11.2
NEW FACTORY ORDERS (bil.$)	111.7	108.4	—	9.2
Durable goods (bil.$)	58.6	55.6	—	8.5
FACTORY SHIPMENTS (bil.$)	110.9	109.5	—	10.2
BUSINESS INVENTORIES (bil.$)	315.3	—	—	10.9
INDUSTRIAL PRODUCTION [2] (1967=100)	138.3	139.0	—	6.4
HOUSING STARTS annual rate (mil. units)	1.91	2.06	—	46.1
CIVILIAN LABOR FORCE [3]				
(thousands)	97,641	97,305	97,697	2.5
Employed	90,679	90,561	90,771	3.3
Unemployed	6,962	6,744	6,926	—7.9
Unemployment rate (%)	7.1	6.9	7.1	*
EXPORTS (mil.$)	10,112	10,150	—	1.9
IMPORTS				
F.A.S. transaction value	12,932	12,476	—	16.4
C.I.F. value	13,810	13,330	—	15.8

ALL DATA SEASONALLY ADJUSTED.
Original data from the Bureau of Economic Analysis and the Bureau of the Census except as noted.
[1] Including inventory valuation and capital consumption adjustments.
[2] Federal Reserve Board.
[3] Bureau of Labor Statistics.
*** Unemployment rate in August 1976 was 7.9 percent.**

As of Sept. 6, 1977

U.S. Homeowners Ignore Energy-Saving Pleas

Homeowners using natural gas apparently are ignoring pleas to conserve the valuable resource, a study by two scientists with Commerce's National Oceanic and Atmospheric Administration (NOAA) suggests.

The rate of natural gas use did not change significantly over the three-year period ending Jan. 1, 1977, according to NOAA's Richard Lehman and Henry Warren, indicating that the average gas-heating customer has not appreciably changed heating habits despite repeated conservation pleas from government and industry, as well as sharply rising prices.

Using a measurement of cold weather known as the "heating degree day," as well as American Gas Association residential sales data, the scientists found that the per-customer consumption of gas for heating is determined almost entirely by the number of heating degree days.

The regions studied included states which use about half of the nation's natural gas heating: Illinois, Indiana, Michigan, Ohio, Wisconsin, North and South Dakota, Minnesota, Nebraska, Iowa, Missouri, Kansas, Texas, Oklahoma, Louisiana, and Arkansas.

The heating degree day information is routinely computed for all of NOAA's National Weather Service temperature observing stations throughout the United States. Each degree the mean daily temperature is below 65 degrees Fahrenheit is one heating degree day. This is commonly used by the heating industry to estimate homeowners' fuel consumption since most furnaces are turned on when the temperature drops below 65 degrees.

First Half 1977 Visitors To U.S. Increased 7 Percent

International visitor arrival figures for the first half of 1977 were released by Commerce's United States Travel Service, the national government tourism office.

International travel to the United States during the first half of the year surpassed the 8 million mark, 7.1 percent more than the comparable period in 1976.

Canadian travel to this country increased 12.1 percent and numbered 5.2 million. Mexican travel exhibited a 2.1 percent decrease, numbering 928,187.

Travel from countries other than Canada and Mexico numbered approximately 1.9 million, posting a minimal 0.3 percent decrease from the 1976 figures. Travel from most major geographic areas overseas was down for the period, but increases were evident in travel from South America (up 2.5 percent), Venezuela (up 29.8 percent), Colombia (up 16.2 percent), and Argentina (up 37.7 percent).

Mining Equipment Mission Makes Andean Discoveries

BOLIVIAN PROSPECTS SURPRISE U.S. COMPANIES: FINANCING HELD CRUCIAL NOW IN PERU AND CHILE

Discovery of some surprisingly attractive opportunities in Bolivia and a confirmation of the importance of financing arrangements in Peru and Chile were among the results of a U.S. mining and construction equipment trade mission that visited the three Andean nations recently.

In Bolivia the group met with planners of two new major projects in iron and tin that will require open pit mining equipment, and achieved impressive sales results. Mission member Victor Soltero of Lincoln St. Louis commented: "We visited Bolivia only because it was on the schedule, not realizing the potential there. We got a very good distributor who is placing a good stock order and made quotations amounting to sizeable figures."

The mission received a particularly outstanding welcome in Santiago, Chile. It was the first official U.S. mission to visit since 1968, a circumstance that was noted in international press dispatches.

The ten firms were offering heavy mining, earthmoving and tunneling equipment, including cranes, shovels, trackless mining equipment, power units, drills, and service items.

Some of the participating firms will return to the region for the Pacific International Fair at Lima Nov. 16-27 and the Santiago International Fair Oct. 27-Nov. 13, to explore further such marketing prospects as the following:

Bolivia's improved political stability has stimulated expansion and exploration plans in both the public and private mining sectors. A $17 million World Bank loan has assisted private projects this year. In the country's 1976-80 Five-Year Plan, mining has been picked as one of four priority areas for increasing and diversifying production. Large investments are being made in building and road construction, and buildings are going up at a boom pace in La Paz, Santa Cruz and Cochabamba. The market is good for U.S. suppliers of mining equipment, technical services, exploration services and feasibility studies.

In Chile, anticipated investments are in the $2 billion range in both the mining and housing fields from now until 1981. Significant additional investments in copper and iron ore mining are expected out of current negotiations between the Chilean Government and private investors. Despite problems, Chile currently has an excellent credit reputation and there is growing confidence in Chile's ability to pursue sound economic and financial policies.

Demand in the mining sector is concentrated in copper and, to a lesser extent, in iron, nitrates and coal. There is substantial need for equipment to maintain, repair or replace existing facilities, and to serve the new mines being negotiated with foreign investors. A 1977 program calls for completion of 7,000 units of public housing under a $55 million U.S. AID financing guarantee. There are plans to construct 273,000 dwellings by 1981, with both public and private financing.

In Peru, new governmental measures have stirred optimism about future economic development, though certain legislation concerning labor and mining communities will have to be modified to encourage investment. Centromin, the major mineral producer, will be acquiring new equipment for its $161 million Cobriza copper mine expansion. The market for mining and earthmoving equipment could reach $200 million by the end of the decade, Peruvians say. Though short of financial resources for advanced construction equipment, Peru has a strong desire to keep abreast of the latest techniques and is pushing ahead with construction approvals in the hydroelectric and irrigation fields, in addition to mining.

Although the greatest long-term sales prospects appeared to be in Peru, current stringencies there may well limit sales to those companies able to arrange financing. In Santiago a number of exciting sales opportunities came into view. Bill Porter of Varel Manufacturing, for example, appointed an agent there and then returned after the end of the mission to call on potential customers with him. Gregory Schaefer of B. W. Darrah had

SESSION IN PERU—*With the city of Lima in the background mission members Gregory Schaefer (left) and Robert H. Cowan confer with a Peruvian group.*

CONSULTATION IN SANTIAGO—*Mission member David R. Royer and mission director Thomas K. Brewer (standing) meet with three Chilean prospects.*

two Latin American regional representatives accompanying the mission and they stayed in La Paz after the mission to supply quotations for four complete repair shops using Darrah crawler tractor undercarriage service and rebuilding equipment. Fred Deyoe and John Maxwell of RO Int'l, Inc., found seven prospective representatives during the mission and then went on to Venezuela to interview others.

Mission members not already named were: Thomas K. Brewer, of the Commerce Department, director; John J. Eckfeldt, Drilco Industrial Div., Midland, Tex.; Ismael P. Marquez, EIMCO Mining Machinery Corp., Salt Lake City, Utah; David R. Royer, Global Marketing Services, Morgantown, W.Va.; Frank Hirner and Rene Motte, Harnischfeger Int'l Corp., Milwaukee; Robert H. Cowan, Sullivan Bolt Co., Commerce, Calif., and Arnoldo Acuna, Wagner Mining Equipment Co., Portland, Ore.

THESE EXPORT PAYMENTS BY FOREIGN BANK DRAFTS PUZZLE U.S. PUBLISHER

A nagging problem in export payment is being called to the attention of the U.S. international business community by a Commerce Department trade specialist on behalf of a Los Angeles firm.

"This small exporter needs helpful advice from someone who may have overcome the problem," declares Jack Rokahr of the Commerce Los Angeles District Office. His appeal is for Data Processing Digest, Inc., which produces a management-oriented digest of computer articles from about 200 U.S. and foreign publications. In recent years, using Department of Commerce lists and other sales efforts, the publishing firm has gained more foreign than domestic subscribers.

But when many of these foreign subscribers attempt to make payment, in "U.S. Funds" as stated on the subscription order form, they drive the Data Processing Digest staff up the walls at their 6820 La Tijera Blvd. offices.

Whose payment is it?

Publisher Margaret Milligan explains the situation: "So frequently that it is becoming a serious administrative problem, we are receiving a check on a U.S. bank with no identification except for the foreign bank's name. What happens then?

"We hold the check, hoping for a follow-up from the subscriber, preferably his subscription card. We call the bank, hoping that they can tell us something else that may have appeared on the draft order that will be a clue to the subscriber's identity. Sometimes we are lucky. Usually we are not.

"This is an expensive and time-consuming procedure. Often we must call a bank in New York—quite a toll charge from Los Angeles during working hours (and only a limited number of hours in the day to make the cross-country contact). These charges could wipe out our profit on the sale! We can even attempt to contact the foreign bank.

"In most cases, we simply hold the check and wait for an irate subscriber to demand delivery of his (paid) subscription. Thereupon begins a correspondence to identify him as the possible payer of the unidentified funds. Many such checks are awaiting identification at any one time. Not a very good company image, is it?

"There is one procedure that can remedy this situation: place on our subscription card an admonition to subscribers to make certain that their name will be placed on the draft. But will that assure us that each bank in the chain of events will include that name?"

One authority who has looked at the Data Processing Digest problem is J. Stewart Gillies, secretary of the Foreign Credit Interchange Bureau-NACM, who says "This is a legitimate complaint and should be aired." He agrees that a reminder stating "subscription order form must accompany draft" would help, but is not optimistic that it will solve the problem in all instances. "When I transmit funds overseas, I ask our U.S. bank to mail me the draft and I personally transmit it rather than let them cable or mail it," he advises.

New Schedule B Is Due Soon

An old friend and helpmate to U.S. exporters—known simply to them as "Schedule B"—is being published this fall in completely revised form.

The Census Bureau publication, which has the formal title of "Statistical Classification of Domestic and Foreign Commodities Exported from the United States," is due to appear in its new form in October. Revised identification of exported products will take effect with the new year.

Various federal agencies involved in foreign trade documentation worked together to produce the new Schedule B, with the assistance of producers, trade associations, exporters and freight forwarders. In structure the revised Schedule B follows the format of the Tariff Schedules of the United States (the import schedule) to provide better statistical compatibility.

Emanuel A. Lipscomb, chief of the Foreign Trade Division of the Census Bureau, offers this advice about the new publication: "I urge readers of *Commerce America* to enter their subscriptions to the new Schedule B as early as possible. The new printing will be available from the Government Printing Office in October. An early subscription will assist in revising any forms or documents with preprinted information in advance of the Jan. 1 effective date.

"Briefing sessions on the new Schedule B will be held in various areas during October and November. These will be coordinated through the local Department of Commerce District Offices, which should be contacted for specific details."

"NOW IF YOU ASK ME . . ."—*An Anglo-American assessment of the taste of dehydrated potato buds converted into french fries is supplied by U.S. Ambassador Kingman Brewster (left) and actor Robert Morley at the London U.S. Trade Center.*

MORLEY-BREWSTER DUO, U.S. FAST FOOD EQUIPMENT STIRRED BRITISH CATERERS

Kingman Brewster and Robert Morley for light banter, followed by dead-serious commercial discussions by 47 U.S. firms with 1,884 potential British customers.

That was the schedule at the recent London U.S. Trade Center exhibition of fast foods catering. The new U.S. Ambassador to Britain and the famous British actor delighted the audience at the opening reception with their nimble repartee, and the intensive marketing activity followed for five days. Results: $500,000 in floor sales, 12-month projected sales of $31.8 million more, appointment of 9 foreign representatives, and negotiations initiated with 135 distributors, subagents or franchisees.

A wide range of catering equipment proved to be in great demand, including chicken fryers, ice-makers, soft ice cream and frozen yoghurt machines, and specialized point-of-sale items. Franchisers such as Kentucky Fried Chicken and Lord Jim's Parlour turned up attractive prospects.

But it was Basic American Foods and its U.K. representative, Roboserve Ltd., that provided the striking success story of the show. Their product, dehydrated potato buds, can be transformed instantly, through matching extrusion equipment, into perfectly-formed french fries. The English fondness for "chips" is legendary, but the small size and high cost of locally-grown potatoes makes it difficult for the caterer to offer a uniform presentable product without considerable waste and spoilage. Marked interest shown at the show indicates that the Roboserve answer to the problem appeals to U.K. caterers. "Without a doubt this was the best exhibition we've been to this year," reported H. A. Hughes of Roboserve.

POZNAN FAIR IMPORTANCE CONTINUES TO GROW; U.S. MAY EXPAND ITS PAVILION

Even at a time when Poland's import growth is slowing, the importance of exhibiting at the annual Poznan International Fair continues to grow. There is simply no question now, say experienced commercial observers, that fair participation is mandatory for those who wish to penetrate the Polish market or keep their good will with Polish end-users.

For the fifth successive year the U.S. had its own pavilion at Poznan, and demand for exhibit space again far exceeded supply. Plans are being considered to increase the pavilion size to handle more exhibitors in future years.

Recent economic shifts have required a new trading strategy in Poland for U.S. firms. There is increased attention now on counter-purchase, buy-back, and other cooperation ventures in order to sell in the Polish market. However, most of the Poznan exhibitors were realistically aware of this situation, and were looking at longer-term prospects.

One executive commented on this point: "My company is interested in the long-run market possibilities in Poland. As makers of capital equipment we do not expect to make quick, immediate sales at the fair. We consider the fair as a tool in our overall long-range marketing strategy for Poland."

The 41 U.S. exhibitors achieved $3.8 million in immediate sales and anticipate 12-month follow-on sales of $74 million. Several new-to-market firms enjoyed significant sales, and one new-to-export firm, a rarity in Eastern Europe, participated in this success.

Two distinguished visitors who have seen other U.S. exhibitions at Poznan called the 1977 version "best ever": Poland's top political leader Edward Gierek, and Rep. Dan Rostenkowski of Illinois, who was President Carter's special representative.

AT POZNAN FAIR—*Rep. Dan Rostenkowski (right), and U.S. Ambassador to Poland R. T. Davies hear equipment explanation from MTS Systems exhibitor.*

AMERICAN PRODUCTS IN CYPRUS—*One of 11 national pavilions at this summer's Cyprus International Fair at Nicosia was that of the U.S., where 22 local agents put more than 40 U.S. products on display and the U.S. Commercial Attache manned an information desk, responding to trade inquiries and scouting trade opportunities.*

Eastern Europe Seminars

Warm response by business audiences in Grand Rapids and Cleveland to seminars on trading with Eastern Europe and the USSR has led to the scheduling of a second series of such seminars.

The sponsoring Commerce Department Bureau of East-West Trade has announced that they will be held in Kansas City on Oct. 6, Pittsburgh Oct. 19, Erie, Pa. Oct. 20, and Chicago Nov. 10.

Featured speakers at the Grand Rapids and Cleveland events in June included representatives from Diamond Shamrock Corp., the National City Bank of Cleveland, Clark Equipment Co., and officials of the Bureau of East-West Trade and the Department of State. The luncheon speaker at both events was Dr. Jozef Soldaczuk, Economic Counselor of the Polish Embassy in Washington.

The seminars this fall will follow a basic program of practical marketing advice. For information contact the Commerce Pittsburgh or Chicago District Offices, the Kansas City satellite office, or the Trade Development Assistance Division, Bureau of East-West Trade, Room 4816, U.S. Department of Commerce, Washington, D.C. 20230, Phone 202-377-2460.

Larger U.S. Share Of Market For Electronics Equipment Seen In Southeast Asia

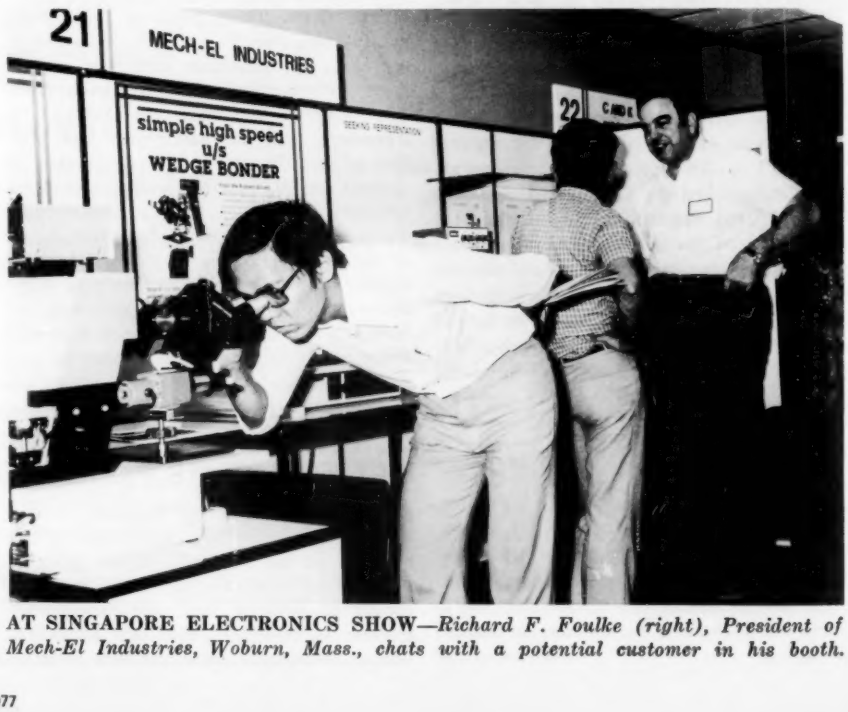
Member countries of the Association of Southeast Asian Nations (ASEAN) are expected to spend more than $100 million on production and test equipment to further develop their electronics industry over the next four years. The growth of this industry in the region is gathering momentum after an impressive recovery from the recent worldwide recession.

Looking toward an increased U.S. share of this market, 25 U.S. manufacturers recently participated in an electronics industry production and test equipment exhibition at the U.S. Regional Trade Center in Singapore. By show's end, the exhibitors projected sales of nearly $10 million over the next 12 months.

As Singapore is slated to become a quality control center for more electronics manufacturers, the exhibition's emphasis was on test instrumentation—about 60 percent of the displays featured such equipment. New products launched at the show included semiconductor assembly equipment, printed circuit board scrubbers, wet deburring machines, environmental test chambers and a microprocessor-based temperature/humidity programmer.

Three of the ASEAN countries are expected to attract additional investments in their respective electronics manufacturing sectors as a result of an improved world economic outlook. Consumption of electronics production and test equipment in these countries during the period leading up to 1980 is estimated to be around $135 million. Malaysia is expected to be the leader, with consumption estimated at $65 million, followed by Singapore at about $48 million and Indonesia at about $22 million.

American manufacturers of such equipment already have about 50 percent of the market in these countries. The prospect of an even greater market share, however, is likely to prompt many of them to pay more attention to the region.



AT SINGAPORE ELECTRONICS SHOW—*Richard F. Foulke (right), President of Mech-El Industries, Woburn, Mass., chats with a potential customer in his booth.*

U.S. FIRMS IN BELGIUM OFFER MANY SERVICES TO FIT BUSINESS NEEDS

The business visitor to Belgium may be surprised to discover that a virtually complete range of services to fit his business needs can be fully supplied by American or American-associated firms. In addition to sleeping in American hotels and eating in American restaurants, he can consult American law firms, accountants, advertising agencies, banks and a multitude of specialists, according to Edward E. Keller, Commercial Attache at the U.S. Embassy in Brussels.

Belgium has attracted significant American capital, with most recent estimates putting U.S. investments in manufacturing at close to $4 billion. Some 388 American companies engaged in manufacturing (at least 50 percent-owned by U.S. citizens) are active in Belgium. Another 447 companies belong essentially to the field of trading and sales. But there is another important group, a very dynamic group of companies and individuals, that should not be overlooked, i.e., U.S. firms engaged in a wide variety of services. Their number in Belgium totals 426 and includes banks, shipping firms, advertising and press agencies, consultancies, law offices, insurance firms, brokerage houses, accountants, contractors, engineering companies, construction firms and electronic data processors.

The chances are good that the American business visitor to Belgium will discover, often to his great surprise, that the very service companies with which his firm works in the United States also have offices in Brussels. It is the astonishing variety reflecting the complexity of international trade today that makes it difficult for the casual visitor, or for the established executive, to find just the right person when needed. The U.S. Embassy Commercial Unit in Brussels or the Consulate General in Antwerp are both good initial points for the visitor to try to find the expertise or service he needs. Another good source of information is the American Chamber of Commerce located at Rue du Commerce 21, 1040 Brussels (Telephone 512.12.62).

A number of useful services are provided by American lawyers and law firms in Brussels. They offer many of the same services as their colleagues in the United States, and in several important instances, do more in that they are prepared to offer advice on doing business in Belgium and in many other European countries. They cannot, however, plead in court or undertake cases involving purely local aspects of Belgian civil law. This is the job of Belgian lawyers. The American lawyer in Brussels is there chiefly to advise on commercial, corporate and tax matters affecting business in Belgium, in other European countries and elsewhere. He sometimes accepts personal cases bearing on U.S. law such as estate planning and income tax matters for the American residing abroad. His essential role is clearly connected with the growth of U.S. and other foreign investment in Europe and the flow of European investment to the United States. U.S. lawyers in Brussels are especially helpful to firms with particular problems within the European Community. These questions could include antitrust matters, customs regulations, and the common agricultural policy. A list of American (as well as Belgian) law firms established in Belgium is available at the U.S. Embassy.

Role of U.S. banks

Banking is another important sector of the service industry in Belgium. At present, 12 U.S. banks operate in Belgium under full or substantial American ownership or as subsidiaries or branches of major U.S. banks. Their size and activities vary widely but generally they complement international operations elsewhere in Europe and the world. A few, with many years in Belgium and extensive relationships there, offer personalized "retail" banking services to the local community in addition to more specialized business services. The others, including most of those established in the last 10 to 15 years, specialize in such business services as credit documentation, foreign exchange and short-to-medium term lending. Several U.S. banks represented in Brussels offer little in the way of banking services but engage almost exclusively in money market operations.

Still another group of services is provided by an impressive number of U.S. accountant and auditing firms. Arthur Andersen & Co.; Deloitte, Haskins & Sells; Gregg Associates (the U.S. parent is Manpower); Peat, Marwick, Mitchell & Co.; Price Waterhouse & Co.; Touche Ross & Co.; Whinney Murray Ernst & Ernst; and Arthur Young & Co. all have active operations in Brussels. The accountants are capable of great versatility, operating both within a Belgian, and a European and American context.

Belgium is a country which attaches great importance to physical comfort and to food. Almost all major U.S. hotel chains are represented there, including Hilton, Sheraton, Holiday Inn, Ramada Inn, Quality Inn and Hyatt. In many cases, the hotel is managed by the American company but is owned, partially or totally, by European investors. In the case of Hyatt, for example, the U.S. firm has a management contract with Belgian owners. The Hyatt Regency opened in October 1976 and has 325 rooms and 50 suites. The offices of the hotel group in Brussels are able to handle reservations for the Hyatt chain throughout the United States and the Far East, where this chain is particularly strong. Similar services are offered by the other leading chains.

Even in the field of food services, American firms are active. American citizens own and run several important restaurants in the Brussels area that are popular with the fastidious Belgians. Greyhound Food Management Inc. owns a company called Restora S.A. which provides canteen services for factories, office buildings, schools, universities and hospitals. An American family sells genuine American-style donuts on the road to Waterloo. The British-American ice cream company Baskin Robbins has a popular outlet in the same area, and other American food franchisers, such as Yummy House and Colonel Sanders, are also beginning to make some impact.

An American company (EUROCLEAN, owned by TEMCO Services) will even clean your office, and another (EUROBLAN of American Linen Supply) will provide linen services for offices, plants and hotels. Others will design and build your factory; Hertz, Avis and National will supply you with transportation; Continental and Greyhound, Pan American and TWA will help you get from here to there.

But it is in the field of management where American companies offer a staggering variety of services to the U.S. investor, visitor or his European counterparts. One group of firms is dedicated to management recruitment, with particular emphasis in finding qualified European executives for American and other national companies. Others recruit blue collar workers and temporary help.

Another group of consultants offers particular marketing services. The American-managed company, Common Market Research Associates, for example, owned by Archer Smith & Associates, a U.S. firm, undertakes market studies to identify the size of a market and evaluate the acceptance of a product and the extent of the competition, and proposes marketing techniques. Another service provided by Common Market Research and by several other U.S. firms is to advise on potential purchases of existing European companies by American firms. It determines the relative market value and the return to be gained from such an acquisition.

U.S. firms are well represented in advertising and public relations. Some of America's most prestigious firms are located in Brussels, such as BBDO, Ted Bates, Marsteller, J. Walter Thompson and the Interpublic Group.

Perhaps the most comprehensive management assistance program is offered by Management Center Europe, the European

JET ENGINE SERVICE TOOLS HEAD FOR BELGIUM—*B. K. Sweeney Mfg. Co. of Denver sent this group of tools this summer to Fabrique Nationale Herstol of Liege, to be used in the production of NATO jet fighter engines. From left are company President John Sweeney, Commerce Department Denver District Office Director Norman Lawson, and company sales vice-president George Zuments. The Denver Commerce office has been assisting the Sweeney firm in its international sales for several years.*

arm of the American Management Associations. This group organizes a wide range of seminars and programs for the business executive in Brussels. It provides elaborate information service and prepares studies and books for members' use.

To illustrate some other types of management services available and to demonstrate the extraordinary variety of these services, one need only select at random the names of a few firms working in the Belgian market. One, called Psychological Services International, undertakes the psychological evaluation of the European business executive who is either a potential job candidate or who has already been hired, in an effort to determine if he has potential for a future management role. Psychological Services International, under its manager Wallon Setzfand, offers career counseling services for executives. Setzfand also gives workshops and prepares seminars to train managers.

Another interesting and highly specialized type of service is offered by Inland Container Corp., which has an official in Brussels. M. B. Tilson is a consultant to manufacturers of corrugated boxes. He offers assistance in industrial engineering, production and financial control, marketing and personnel. He is able to draw on the expertise of the American staff of the 26 U.S. plants of Inland Container Corp.

As shown, no American business executive need flounder in Belgium for lack of expert advice. The right information and the right means to accomplish his objectives are almost certainly available in Belgium—and from Americans.

NEW ECONOMIC PROGRAM HEIGHTENS EXPECTATIONS FOR SPANISH ECONOMY

From the death of General Franco until the June 15 elections, Spain experienced a rapid political transformation to democracy. This important and delicate metamorphosis made difficult a full response to the new economic situation which followed the 1973 Arab oil embargo and the subsequent world recession. Since 1974 there has been accelerating inflation and rising unemployment in Spain, and balance of payments deficits have become a major and growing concern, according to the U.S. Embassy in Madrid.

The Spanish economy in 1975 and 1976 was in worse shape than it had been at any time since the 1959 tourist boom helped launch Spain into the prosperous 1960s. Current account balance of payments deficits were $3.5 billion in 1975 and $4.25 billion last year. The annual inflation rate rose from 14 percent in 1975 to 20 percent in 1976. Unemployment rose to 5.3 percent of the work force by the end of this period. Largely because of the tolerant monetary policy that financed Spanish inflation, GDP growth was better than in most European countries during this period and consumer demand remained strong.

Other problems have limited national growth prospects and cannot be solved directly. Principal among these considerations are the oil price hikes since 1974 (more than one-quarter of Spanish imports are now petroleum products) and the overall trade deficit, shrunken tourist revenues, reduced foreign investment, and fewer job opportunities abroad for Spanish workers. All of these ills have an adverse effect on both the balance of payments and the domestic economy, and are not susceptible to solution by unilateral action.

No real economic recovery can be expected before next year from the reform and austerity measures the government has announced. According to a newly devised consumer price index, consumer prices during the first five months of this year point toward an annual inflation rate above 25 percent for 1977. Wholesale prices are rising even faster. Unemployment is climbing steadily and is already the major concern among labor leaders and opposition political parties. The very large balance of payments deficit of 1976 will probably be repeated this year.

The combination of economic problems facing Spain is difficult to deal with. Until this year Spanish authorities had felt that an export-led recovery, responding to renewed growth and demand in the United States and Western Europe, would substantially improve the economic situation. However, the value of Spanish exports is already increasing at a healthy pace and it is now clear that the dimension of Spain's problems requires that fundamental economic adjustments must be made by Spain itself.

The cumulative effects of these problems can no longer be ignored, and an economic recovery program has now been announced by the Suarez Government. The outlook for the remainder of 1977 will depend on when and to what extent the announced economic measures are implemented. Until effective measures to dampen the wage/price spiral are actually instituted, the outlook for the Spanish economy will remain poor. If the proposed measures can be put into effect in the near future, benefits could be realized next year and the medium-term outlook would be much improved. The specific short-term matters that are most at issue are inflation and wage increases, the rate of money growth, fiscal policy with emphasis on increased income tax collection, the efficiency of the banking system, and interest rates for savers and lenders that are still well below the inflation rate.

It is frequently generalized that the core problem is that Spanish workers now expect rising real wages even in the face of nearly stagnant production, and wage controls will only be fully accepted by the workers if other measures (stronger price controls, increased taxation of middle and upper-income earners) are taken. Labor insistence on continuing real wage increases derives from the fact that Spanish

worker wages are still low by European standards, and income inequality is high.

On the positive side, the gravity of the present economic situation appears to be well understood by the public, and most opinion makers are in accord on the need for comprehensive measures to dampen the wage/price spiral. The Spanish Government proposes to dampen this spiral by limiting all wage hikes to about $575 a year, or less. In return, workers are offered broader price controls and increased taxation of better-off Spaniards.

Further encouragement is being found in the July 4 appointments of a Vice President for Economic Affairs and a new Finance Minister. Both appointees are respected professionals who favor immediate action to solve Spain's economic problems. The two new leaders also place special emphasis on the promotion of market competition.

The principal measure the new Spanish leaders have brought into effect is the July 12 peseta devaluation. The government has also announced its intention to treat unemployment with public works projects and with compensation for jobless workers. Specific proposals have been made for more effective tax collection, for a new wealth tax and for a surtax on high salaries. These tax measures are designed to reduce income inequality slightly and to increase somewhat the government's revenues. Inflation will be fought by reducing the rate of money growth and by the proposed strengthening of wage and price controls. With Spanish price inflation above 25 percent, however, all of the measures will need to be implemented to assure an economic recovery.

U.S. Chamber Can Help

The American Chamber of Commerce in Spain, through its monthly newsletter and direct communications, can assist U.S. companies in initiating a business relationship with any of its more than 2,200 members. U.S. firms desiring to use this free service should contact the Chamber directly and include the Standard Industrial Classification (SIC) number of the product lines for which representation is sought. The Chamber's headquarters is located at Avda. Generalissimo Franco 477, Barcelona-11.

The trade and balance of payments outlook remains unfavorable for Spain. Not much change can be expected this year from the very high payments deficits of the last three years, although the trade deficit has narrowed somewhat as has the surplus in services and invisibles. By value Spanish exports increased 13 percent last year and 35 percent in the first five months of 1977, but the trade deficit has not narrowed greatly. This slightly reduced trade deficit is being largely offset by lower earnings from services and invisibles. Some improvement in the payments deficit may result from the 25 percent devaluation of the peseta. Following the devaluation, a 20 percent surtax on import tariffs was abolished. At this time the government's announced policy is to maintain a controlled float of the peseta and to resist pressures for more protectionism.

Estimates of Spanish public and private foreign debt range upwards from $12 billion, and the debt level is already the cause of some concern. Spain's foreign reserves, which stood at $4,258 million in May, still provide a cushion. However, with the current account deficit expected to be again this year around $4 billion, and with considerable debt refinancing, reserves will continue to fall.

On July 28 Spain formally applied for membership in the European Common Market. No immediate response from the Common Market is expected. Spain cannot, in any case, expect to complete accession negotiations before 1980 or to be integrated fully into the Common Market within the next five years. Eventual membership will require many changes in Spanish trade and business practices.

Political and economic relations between the United States and Spain were formalized by a 1976 Treaty of Friendship and Cooperation. The two governments are currently negotiating a treaty to provide relief from the double taxation of income.

In the past year, some items which had been free of import quota limitations were placed under quota. Following the July devaluation, however, Spain ended the temporary tariff surcharges which were imposed last year on "non-essential" imports.

A turnaround in Spain's balance of payments deficit is interdependent with a variety of internal and external factors and is certainly not a very immediate prospect. The devaluation of the peseta may slightly reduce Spanish imports of price-sensitive goods and will make many Spanish exports more attractive, but no dramatic changes in trade patterns are expected. If any measures are taken to discourage imports, they could be expected to affect selectively some goods and services more than others, i.e., "non-essential" imports.

All in all, Spain remains an attractive market for U.S. products. Capital goods sell well there and should continue to do so, notably in basic industries such as iron and steel, energy production, construction, mining and agriculture. Spanish labor costs are rising rapidly and management is increasingly interested in labor-saving equipment and systems. Other lines such as health care equipment, process control and laboratory instrumentation and computers have a solid market.

POSITIVE DEVELOPMENTS BRIGHTEN KENYAN SCENE AS REGIONAL TIES FADE

Despite the crackup of the East African Community, Kenya may realize one of the best economic years in its history in 1977. U.S. exports to Kenya could easily rise by 12 percent, reports John J. Eddy, Economic/Commercial Counselor at the U.S. Embassy in Nairobi.

Last year's record harvest of coffee coincided with world prices sailing through the roof. Receipts from tourism grew 18 percent to $100 million. Tea prices shot up as a result of tea's substitutability for coffee. By the middle of May, foreign exchange reserves had reached $486 million —a thumping figure considering the merciless oil-price rises of 1974-75. Reserves have in fact risen 74 percent since January, and Kenyans look forward to a near certain balance of payments surplus in 1977. In 1976, surging coffee prices narrowed Kenya's deficit in trade with the United States to $13 million, from $40 million in 1975.

Though petroleum imports still account for 25 percent of Kenya's $1 billion import bill, coffee has become Kenya's own version of "black gold," helping significantly to counteract exaggerated oil prices. Coffee earnings reached $212 million in 1976, an all-time record in terms of price, volume and quantity. Kenya also enjoyed good receipts from refined petroleum products, tea, meat and meat products, canned pineapples, wattle extract, maize, and hides and skins.

Unusually heavy rains this year damaged some crops, such as beans, but raised the water table for greater moisture-reliability in the future. There is a residual danger that if the short rains that normally come in October begin too early, coffee berry disease could set in. There are already some signs of incipient disease, but nothing alarming as yet.

In general the benefit from the most drenching rains in two decades has far outweighed any damage to short-cycle food crops.

Total Kenyan imports last year topped $950 million in value, up 17 percent from 1975. Purchases from the United States declined 5 percent to $57 million, an unusual retreat accounted for in part by a lull in buying U.S. aircraft and related parts. Nonetheless, American transport equipment and chemicals paced U.S. sales.

Not everything has come up aces for Kenya in recent months. Since January, in particular, the progressive crackup of the East African Community has deprived Kenya of significant earnings from tourism and has curtailed Kenyan exports to Tanzania. To provide some measure of what trade with Tanzania used to mean, Kenya sold almost $60 million in goods to its southern neighbor in 1976, while buy-

ing only $30 million in return. The trade balance was thus overwhelmingly in Kenya's favor. In January, however, apparently reacting to what it considered a provocatively precipitate startup of Kenya Airways after the grounding in Kenya of 30-year-old East African Airways on Jan. 31, Tanzania closed its border to Kenyans. Tanzania also impounded $7 million in Kenyan light aircraft, heavy trucks, and tour vehicles. The border has remained closed, and Kenya's economic relations with Tanzania have deteriorated rapidly.

The situation with Uganda is not much different. Much of Kenya's $67 million in "domestic" exports to Uganda in 1976 comprised only value-added for petroleum products from Kenya's Mombasa refinery. Kenya imported a mere $2 million from Uganda last year, a figure which goes a long way to explain one reason why the EAC is falling apart: disparities in economic development are just too great. The big Community corporations—airways, railways and ports—have now been effectively nationalized. Posts and Telecommunications will probably follow despite the obvious diseconomies of scale which this will mean in the expensive telecommunications field.

Kenyans say that Tanzania's closing of its border has forced them to develop their own self-contained southern tourist circuit to attract overseas visitors, who will be carried in part by Kenya Airways. Elimination of the great parks of Tanzania from the package will hurt, but the rains are restoring animal and plant life, and partly for that reason the Minister for Tourism expects record receipts of $120 million in 1977, up 20 percent from 1976.

The United States is quickly becoming one of Kenya's most important economic partners. Compatible ideas regarding the role of the private sector is one explanation. Specific needs which Americans can fill are another. General Electric's sale of 26 diesel electric locomotives to Kenya in 1976 provided a great boost for U.S. exports and braced the U.S. commercial image. Other signs of increasing U.S. commercial vitality are: last year's groundbreaking for N-Ren's $54 million fertilizer plant in Mombasa; this year's construction of a new $7 million General Motors assembly plant; Chemtex's plans for a $32 million polyester staple and filament plant in Nanyuki; and completion of an $8 million addition to the Nairobi Inter-Continental Hotel.

U.S. economic assistance to Kenya has risen to a proposed level of $30 million a year. Of special interest to U.S. business are U.S. AID's plans to upgrade secondary and minor roads, which should result in the purchase of American trucks and roadbuilding machinery.

Active American commercial involvement is also obvious in the vigorous efforts of the Overseas Private Investment Corporation, to facilitate U.S. investment in Kenya through loans, investment insurance, or perhaps OPIC's own equity participation. The Eximbank has likewise kept close tabs on Kenya. Exim has offered financing for aircraft, locomotives, hotel equipment and sugar-milling machinery. Teams from both Eximbank and OPIC visited Kenya in 1976 and reported a favorable business climate. They and other visitors discovered opportunities in food processing, beef production, energy systems, health care, and various light manufacturing industries.

In March, Business International held a roundtable in Kenya with the participation of the Kenyan Vice President, Attorney General, and six key Ministers. The roundtable's conclusions, though proprietary, are believed to have confirmed Kenya as a suitable area for selected investments.

Determining priorities

Worth careful tracking by U.S. business this year is the drafting of Kenya's new Five-Year Development Plan, to be released in mid-1978. The plan is expected to place considerable emphasis on the development of Kenya's extensive drylands, which cover some two-thirds of the country. U.S. AID has already undertaken a major study of several semi-arid districts. The study will conclude by recommending various methods of rehabilitation. A project-design phase will follow with subsequent foreign assistance anticipated from AID and other donors.

The American firm, Chemonics, recently completed a meat study for the Kenyan Government; it covered meat marketing, domestic and foreign.

In January, the President of the U.S. Agribusiness Council visited Kenya and concluded that there would be interest on the part of the Council's 80 corporate members in assisting Kenya to realize the potential of its drylands. Markets already exist in the Middle East and Europe for vegetables and meat products.

The American consulting engineers, Tippetts-Abbett-McCarthy-Stratton (TAMS), have won an important contract from the Kenyan Government to develop a master water plan for all of Kenya.

The following are other upcoming major projects in which American business could conceivably find some role to play. The Tana River is to be developed in its upper reaches for hydroelectric power and water supply, as well as irrigation. Plans call for a dam and power plant comprising two 20 MW turbines. Combined with earthworks for a reservoir of 75 square miles and irrigation equipment, the project should cost $100 million. Much of the financing is to come from the European Community. The corresponding lower Tana irrigation scheme (Bura) for cotton, maize, and peanut production is to cost $80 million. A Louisiana firm may propose a feasibility study to the Kenyan Government in mid-1977 for development of a sugar scheme in Busia District of Western Province.

Other projects which may be of interest to U.S. business are: a $65 million extension of the Nairobi water supply system; a geothermal energy project in the Rift Valley, to cost about $15 million; equipment purchase of $3.5 million for the new wing of Kenyatta National Hospital, making the hospital the biggest in black Africa; more sites and services schemes for low-cost housing in Nairobi, Mombasa and Kisumu; and a mini-integrated steel plant to produce 250,000 tons annually of flats, rounds and other sections.

More modest, perhaps, but nonetheless interesting, are the following opportunities being promoted by Kenya's Industrial Survey and Promotion Center. ISPC wants to see Kenya's food-processing industry develop further, utilizing asparagus, mushrooms, mangoes and tomatoes. It is also touting cattle feed lots, tanning and leather processing, and vegetable oil production. It sees possibilities for molasses-based yeast, fish, animal feeds, caustic soda, ceramic sanitary ware, sheet glass, reclaimed rubber, leaf springs, automobile components, and paper-mill strawboard.

How can you, as an American, best do business with Kenya? Kenyans respect follow-through, consistency, boldness and straightforward talk. You can accomplish relatively little initially by mail, though preliminary correspondence could pave the way for a successful personal meeting later. The wisest course is to go to Kenya.

Kenyans do not rush major decisions. Their caution is reasonable rather than ceremonious, however. Sooner or later you will have to travel there and get to know the Kenyans if your firm is to have a Kenyan future. Even if you are selling to Kenya now, you cannot afford to ignore the growing trend toward local production. Your sales could be reduced to zero. On the other hand, Kenya's state-run Industrial and Commercial Development Corporation is actively looking for foreign investment partners and can assist in arranging preferential marketing conditions. Private Kenyans who are benefitting from coffee money are seeking to diversify their business interests.

Watch the schedule of trade promotion activities of the U.S. Department of Commerce. In November there will be a Nairobi catalog show covering hotel and restaurant equipment. Commerce is planning other interesting events, including a possible technical trade mission specializing in water development techniques and equipment.

Finally, don't view Kenya as just a long-shot in your worldwide sales efforts. Kenyans have never been more receptive to U.S. products, investment or ideas.

CONSUMER GOODS LEAD UPSWING IN U.S. SALES TO BOOMING GUATEMALA

Guatemala has one of the fastest growing economies in Latin America, according to Ralph D. Griffin, Commercial Officer at the U.S. Embassy there. Real GNP growth for 1977 is predicted to be around 9 percent, down only slightly from last year's strong increase of 9.9 percent. Foreign exchange reserves are at a high of over $700 million. With receipts from coffee expected to continue at record levels, cotton prices strong and exports of nickel concentrate due to begin around mid-year, the outlook for Guatemala's economy for the next year is excellent.

What this means for the U.S. exporter is outstanding opportunities for the sale of goods and services. Total Guatemalan imports for 1977 are predicted to reach $1.2 billion, and Griffin anticipates imports of at least $400 million of U.S. goods this year. This contrasts with U.S. exports to Guatemala of $145 million as recently as 1973. In 1976 U.S. exports to Guatemala increased 32 percent over 1975 to $334 million, the sharpest increase of any country in Latin America except Barbados. Guatemala is now the eleventh largest U.S. market in Latin America and may become tenth in 1977.

Ironically, the beginnings of the current boom can be traced to the tragic earthquake of February 1976. Although the loss of life and destruction of housing was tremendous, industry and agriculture were not seriously damaged. Immediately afterwards, massive amounts of relief goods and funds began pouring into the country and a vast reconstruction program was launched. Fueled by millions of dollars of foreign and domestic loans, insurance payments and record exports, a building boom ensued that has continued unabated, although public works projects now dominate the construction effort. To cover the reconstruction effort, the Guatemalan Government almost doubled its 1976 budget.

At the same time, coffee prices reached unprecedented heights while the price of cotton was excellent. As the construction effort competed for labor, workers' salaries in general rose rapidly, putting all types of appliances and other consumer goods within their budgets for the first time. However, on the minus side, the economic upturn also has sparked a resurgence of inflation. Inflation hit 10.5 percent in 1976 and could exceed that amount this year.

The outlook for U.S. exports is very bright. Shipments of U.S. industrial goods to Guatemala rose sharply last year.

Also, there were dramatic increases in shipments of household appliances, TV sets and furniture. The creation of many new boutiques has brought on a sharp jump in imports of U.S. clothing.

This year the beginning of construction of two major hydroelectric projects, the rebuilding and paving of over 300 kms. of highway, the construction of a new airport in the north and the investment of more than $50 million in a series of new hospitals and health clinics will guarantee a continuation of last year's record growth in imports of U.S. construction machinery. It is also possible that construction of a new port on the Pacific Ocean will begin within a year. Likewise, imports of building supplies will remain strong, with many new housing projects already under way or about to begin. A total of almost $100 million is slated to be invested in public housing this year.

Other product categories that should do well are health and laboratory equipment to supply the hospitals under construction, communications equipment needed for the continued expansion of the national telephone system and electrical power and distribution equipment for the national power grid. With agricultural income at record heights, purchases of business aircraft, helicopters, fertilizers and insecticides and agricultural machinery should be high. Although the coffee rust disease fortunately has not struck Guatemala, fear that it may should stimulate the sale of spraying equipment and copper-based fungicides. Hotel construction is leveling off but continuing development of tourism will ensure good sales prospects for restaurant equipment. Consumer goods sales should remain strong. On the industrial side, the Guatemalan Government is continuing its efforts to stimulate investment in food processing. Sales of machinery to process and pack various new crops should be good.

Finally, exploration for oil by a U.S./Luxembourg consortium continues in Guatemala's north central region, and construction of a pipeline to carry crude oil to the Caribbean Coast is to begin soon.

South Africa Freezes Prices On Agricultural Machinery

The South African Minister of Economic Affairs has invoked the Price Control Act of 1964 to reimpose price controls over agricultural machinery. Prices have been frozen at the levels existing on Aug. 5. Companies which had raised prices during the period July 1-Aug. 5 will be required to submit full particulars of the cost increases on which their price increases were based.

The reimposition of controls reflects the high demand for agricultural equipment in South Africa. In contrast to the general stagnation of South Africa's economy, the agricultural sector is booming. The volume of agricultural production increased 12.4 percent during the 1976/77 season compared with the previous year; more significantly, the net income of farmers during the 1976/77 season rose by 40 percent, or from $1.2 billion to $1.7 billion. This is rapidly being translated into increased sales of equipment.

Calendar For World Traders

Sept. 15—Chicago—Doing Business in Mexico seminar, Pick-Congress Hotel. International Trade Club, 312-341-9021.

Sept. 16—Boston—Semiconductor Equipment and Materials Institute Export Control Seminar. Keynote speaker: Commerce's Stanley Marcuss, Deputy Asst. Secretary for Domestic Commerce.

Sept. 17—Cookeville, Tenn.— Second annual Business and Industry Day, Conference on Tennessee's International Trade. Keynote speaker: Memphis District Office Director Bradford H. Rice.

Sept. 20—New York—American Management Associations seminar: Short-term Business Prospects in USSR. Commerce speaker: J. Mishell George, Director, Office of East-West Country Affairs.

Sept. 20—New York—World Trade Club luncheon, Doing Business with Romania.

Sept. 20—Los Angeles—Doing Business in Middle East seminar, Hilton. Export Managers Assn. of Calif., 213-985-1158.

Sept. 20—Memphis—World Trade Club meeting, Travelodge.

Sept. 20—New York—FCIB Hardware-Automotive & Allied Trades Group meeting, Summit Hotel.

Sept. 21—Greenville, S.C.—District Office seminar: Facilitating Textile Machinery Business in Europe and the USSR. Jack R. Anderson and Val Zabijaka of Commerce's Bureau of East-West Trade will speak.

Sept. 21-22—San Antonio—Conference on U.S.-Mexican Trade and Investment. Sponsors: U.S. Department of State, Mexican-American Trade and Investment Consortium. Keynote speaker: Patrick J. Lucey, U.S. Ambassador to Mexico. Information: 202-632-2710.

Sept. 23—Seattle—Seminar on U.S. Business Opportunities in Indonesia. Commerce District Office, Rainier National Bank.

Sept. 23—Chicago—Meeting on new boycott regulations, Hyatt Regency. Stanley Marcuss, Deputy Asst. Secretary of Commerce, will speak. Information: 312-726-3860.

Sept. 26—Luxembourg—FCIB conference, Holiday Inn.

Sept. 26-27—Houston—Doing Business in West Africa seminar, World Trade Center. Information: 713-226-4231.

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about upcoming trade exhibits and trade missions, licensing and joint venture proposals, opportunities to sell to foreign enterprises, visiting buyers, and details on major construction and expansion projects.

U.S. Promotions Abroad

For more facts on these and other U.S. exhibitions write: Director, Office of International Marketing, Rm. 4015, U.S. Department of Commerce, Washington, D.C. 20230. For trade missions: Rm. 6051, U.S. Department of Commerce, Washington, D.C. 20230.

School Construction and School Equipment Catalog Exhibition. Liberia, Nigeria, Zambia. November. Important steps are being taken in these countries to improve educational facilities. Catalog Exhibition Section, 202-377-3973.

Rehabilitation USA — Aids to the Handicapped and the Disabled Exhibition and Technical Seminar. U.S. Trade Center, Tokyo. Nov. 7-11. Will feature five major product/technology categories: orthotics and prostheses; architectural/transportation and mobility; physical and occupational therapy; sensory aids/adaptive systems; and educational/training systems. Irwin Nathanson, 202-377-4390.

Computer Software Trade Mission to Japan. Nov. 7-17. Japan is the second largest computer market in the world. Expenditures by the manufacturing sector alone on computer hardware were estimated at nearly $1 billion in 1976. The Japanese Government has just liberalized controls on foreign activity in the software industry. Wanda Ale, 202-377-3119.

Tandem Exhibitions: Electronic Production and Test Equipment, U.S. Trade Center, Paris, Nov. 14-17; Productronica '77, Munich Fair Grounds, Nov. 22-26. U.S. manufacturers may exhibit at either or both shows to increase their share of a Western European market expected to reach $343 million this year. The Paris Trade Center staff will arrange shipment of exhibit material from Paris to Munich in time for the opening of Productronica '77. For further information contact Don C. Schmadel, 202-377-2920.

Fire Detection and Prevention Seminar/Exhibition. U.S. Commercial Office, Moscow. Nov. 14-18. In anticipation of the 1980 Olympic Games, Soviet authorities are planning to upgrade fire prevention and detection facilities in hotels, apartments, restaurants, schools, and hospitals. Jim Robb, 202-377-4810.

U.S. Electronics Production and Test Equipment and Electronic Components Catalog Exhibition. Vienna. Nov. 14-18. The electronics industry is one of the fastest growing sectors of the Austrian economy. Efforts currently being made to introduce new, highly sophisticated production lines and increase output by employing new technologies and advanced manufacturing equipment offer excellent opportunities for U.S. manufacturers. Catalog Exhibitions Section, 202-377-3973.

Industrial Process Controls and Instrumentation Exhibition. Caracas. Nov. 14-19. Venezuela, buoyed by oil income, is attempting to establish a modern industrial economy in the shortest possible time. Industrial process controls will be playing a major part in this development. For additional information contact Hans J. Amrhein, 202-377-2332.

Mining and Material Handling Equipment Exhibition. U.S. Trade Center, Sao Paulo. Nov. 22-26. Brazil is one of the world's largest repositories of mineral wealth. Massive exploitation is planned between 1978 and 1980 by the Brazilian Government to improve the country's balance of payments. Best sales prospects are in exploration, underground, and open-pit mining equipment. Other categories include electronic control systems and communication equipment. Annette Napper, 202-377-5427.

Electronic Production Machinery, Test Instrumentation and Materials Catalog Exhibition (INTERELECTRONIC). Brussels. Nov. 26-Dec. 3. Belgian trade sources predict an increased demand for electronic components, production and test equipment and special materials consistent with the expected 13 percent annual increase in the consumer, computer, communications, telecommunication control and instrumentation, medical and components supply sector of the industry. The industry trend continues toward greater efficiency and greater production through more automation and improved automatic equipment. Automatic testing equipment appears to be of the highest interest. Catalog Exhibition Section, 202-377-3973.

Lagos International Trade Fair. Nov. 27-Dec. 11. The Nigerian $50 billion Third National Development Plan (1975-80) makes provisions to improve many inadequacies in economic development. Among areas given primary importance are agricultural development, the communications network, building and road construction. Plan allocates $3.6 billion for strengthening agricultural sector. There is no local production or assembly of agricultural equipment. Imports are expected to reach $50 million by 1980. Reginald F. Biddle, 202-377-4564.

Printing and Graphic Arts Equipment Exhibitions. U.S. Trade Centers: London, Nov. 28-Dec. 1, and Stockholm, Dec. 6-9. Designed to feature a broad range of equipment with good sales potential in the U.K. and Scandinavian markets. Market research recently conducted in the United Kingdom and Scandinavia has identified opportunities for U.S. producers of printing and graphic arts equipment. In the United Kingdom, the level of investment in 1976 in graphics industry equipment reached $88 million; it is expected to increase to $119.7 million in 1981. In Scandinavia, also a dynamic market, sales are expected to increase by about 27 percent to $175 million in 1981. For further information contact William G. Stepp, 202-377-4602.

Petrochemical Processing Technology and Equipment Technical Sales Seminar. Romania, Bulgaria, Yugoslavia. December. Seminar will focus on specific interest shown by the three host countries with particular emphasis on the Romanian-Kuwaiti joint venture at Navordari, a proposed billion-dollar complex. Bob Bradshaw, 202-377-5164.

Electronic Data Processing Seminar Mission. Algeria, Tunisia and Syria. Dec. 3-15. The rapidly emerging economies of North Africa and the Middle East are looking to U.S. EDP technology as a vehicle to facilitate and implement their ambitious development programs. The Algerian EDP community considers itself capable of absorbing the full impact of the latest technology. Use of computers in Tunisia is growing. The government is adopting modern systems analysis techniques which will bring in more than the 50 medium-to-large computers now operating in Tunisia. Syria is beginning to enter the computer age and the country is showing signs of making greater investments in computer technology. Contact Geoffrey H. Walser, 202-377-2973.

Building Materials and Equipment Exhibition. U.S. Trade Center, Tehran. Dec. 4-8. The Iranian Government is committed to an intensive housing construction program that offers excellent opportunities for U.S. firms in the areas of building materials, prefab components, plumbing, fixtures, hardware, tools, and related equipment. Some $3.4 billion has been allocated for construction of 800,000 housing units during the 1973-78 period. Plans call for 3.7 million housing units to be built by 1991. The market for building and construction materials and equipment is growing at an annual rate of 35 percent. Bill Monroe, 202-377-2952.

Business Equipment, Computers and Peripherals Exhibition. Caracas. Dec. 5-10. The Venezuelan market for business equipment is expected to grow at an average rate of 28 percent during the 1976-79 period, a pace which will boost annual consumption from $67 to $140 million. Demands will be fueled by a rapid expansion of government services and accelerating modernization of business practices —both stimulated dramatically by substantial recent increases in oil revenues. Venezuela depends almost entirely on imports for business equipment and U.S. manufacturers are the leading suppliers to the market. Imports from the United States are expected to double from $41 million in 1976 to $88 million in 1979. Hans J. Amrhein, 202-377-2332/2995.

Electrical Energy Systems Technical Sales Seminar. Poland, German Democratic

Republic, Hungary. Dec. 5-15. The five year plans from these three countries place high priority on development of generation, transmission and distribution, and storage of electrical energy. Large investments in equipment and instrumentation are to be made during the 1976-80 period. This seminar will be limited to six companies. Mike Frisby, 202-377-5186.

Electronic Production and Test Equipment Trade Mission to India. January. Indian market for imported electronics industry production and test equipment is expanding. In 1976-77, nearly $50 million worth of such equipment will be required by end-users; of this, an estimated $40 million will be imported. Equipment identified by market research as offering highest sales potential includes circuit production, printed circuit and passive component production, wiring, assembling and other interfacing, and test equipment for production/inspection of electronic products. Mollie Cleveland, 202-377-4511.

Medical Equipment Trade Mission to Israel and Iran. January. In Israel, American medical equipment enjoys a good reputation for quality and after-sales service. Israeli market for medical equipment is expected to rise to $24 million by 1980, of which $21 million will represent imports. One of the top concerns of Government of Iran has been expansion and improvement of health care delivery system. Capital investment in health facilities by public sector is expected to grow from $147 million in 1976 to $392 million in 1980. In addition, investment in the private sector is now growing at a 20 percent annual rate and should reach $27 million by 1980. The market for medical equipment, over $44 million in 1975, is expected to grow by 15 percent a year through 1980. Mollie Cleveland, 202-377-4511.

Textile Machinery Seminar Mission. Philippines, Thailand, Korea. January. The Korean textile industry occupies a preeminent position in the Korean economy as the most important export industry. The government actively promotes expansion of textile production facilities and is about to invest some $1.026 billion in production expansion over the next 5 years. In Thailand, textile manufacturing is the major industry with investment exceeding $650 million. U.S. machinery has become more price competitive since 1970. The textile industry in the Philippines is making a rapid recovery and industry leaders are optimistic that substantial textile plant expansion will result. Seminar participation is limited to 7 U.S. firms. Robert J. Bucalo, 202-377-3741.

U.S. Electrical Energy Systems Trade Mission to Saudi Arabia, Oman and Iraq. January. Market prospects for this region in the next few years are excellent. The potential includes projects ranging from the most basic rural electrification by private utility companies to nationwide integrated power systems to be built by government. Included are plans for desalination plants, solar energy systems and nuclear power plants. The mission will be geared to take advantage of intense government interest as demonstrated by the major role electrification projects play in the national development plans. Contact Craig S. Atkins, 202-377-2973.

U.S. Building Products & Construction Equipment Catalog Exhibition. Korea, Hong Kong, Australia. Jan. 11-25. U.S. manufacturers of building products and construction equipment should find excellent opportunities to gain exposure, find representatives and test sales in these three lucrative markets. Korea's plans for continued expansion of heavy industry, mining and irrigation projects and the rural development under its Fourth Five-Year Plan should guarantee increased sales of U.S. manufactured equipment. Hong Kong is undertaking a massive housing program for more than a million people by 1986. In addition, major plans are under way there for private development of Lantou Island (larger than Hong Kong itself) as a resort, totaling more than 5,000 apartments and villas. Australia's market for this equipment is expected to increase 11.5 percent by 1979, as rising private incomes, labor costs, and need for low-cost housing create a variety of demands. Catalog Exhibitions Section, 202-377-3973.

AT NEW SAO PAULO U.S. TRADE CENTER—*An inaugural show sponsored by the American Chamber of Commerce in Brazil in May brought together (from left) U.S. Ambassador John Crimmins, Center Director Martin Heflin, and Commerce Assistant Secretary Frank Weil. The Center's regular schedule begins this month with an exhibition of industrial process controls and instrumentation.*

Frozen Food Equipment and Technology Technical Sales Seminar. Poland, Hungary, Yugoslavia. Jan. 14-27. Equipment for cold storage, quick freezing, and preservation of fruits, vegetables, meat prepared dishes and meals. Among equipment needed is: fluidized air freezing and liquid contact freezing equipment, air blast belt freezers, air blast tunnel freezers, compressors, automated control panels and alarm systems for cold storage areas, packaging mobile facilities for distribution, quick frozen ready to eat institutional meals, pre-processing holding area design and equipment, and other equipment. Judith Robinson, 202-377-3376.

Computers and Peripheral Equipment Exhibition. U.S. Trade Center, London. Jan. 16-20. Great Britain represents one of the largest single markets for U.S. computers and peripheral equipment. British computer market is expected to reach $1.2 billion by 1980 with the U.S. share anticipated to be well over 60 percent. Indications are that U.S. sales of large, medium and small computers will continue to rise, while sales of U.S. minicomputers and peripheral hardware will follow a much steeper upward trend. Mini/micro computers also offer outstanding sales opportunities. John L. Wolf, 202-377-3459.

Pollution Control Equipment Exhibition. U.S. Trade Center, Sao Paulo. Jan. 16-20. In June 1976 the State of Sao Paulo put into effect a law on pollution, the first comprehensive pollution law in Brazil. Imports of air and water purification and pollution control equipment are expected to rise from $38.8 million in 1972 to $72 million in 1978; U.S. is expected to capture more than one-third of the 1978 market. A seminar will be conducted in conjunction with the exhibition; U.S. exhibitors will be invited to participate. Beryl Cohen, 202-377-5427.

Printing & Graphic Arts Seminar/Exhibit. U.S. Commercial Office, Moscow. Jan. 16-20. Only Moscow and Leningrad in the USSR have printing equipment that meets Western standards; elsewhere in the Soviet Union the printing and graphic arts equipment is defective, outdated, or obsolete. Demand for modern printing and graphic arts equipment is high due to the Soviets' goals of modernizing and expanding existing printing facilities. Jim Robb, 202-377-4810.

Chemical and Petrochemical Exhibition. U.S. Trade Center, Tehran. Jan. 22-26. Iranian government planners have placed special emphasis on the rapidly expanding chemical and petrochemical industries. In the next ten years, Iran plans to spend $8 billion on the petrochemical industry alone, and the long-range outlook for other chemical and downstream petrochemical industries is one of accelerated development. In aggregate, Iran will purchase an estimated $177 million worth of chemically associated equipment in 1980, while annual capital expenditures in this field are expected to reach $1 billion by the beginning of the next decade. Contact Don Ryan, 202-377-2952.

Computer Systems Seminar Mission. Spain, Greece and Turkey. Jan. 23-Feb. 4. A computer seminar appears particularly timely for these three markets as industry and financial institutions press for increased efficiency and better utilization of computer systems. Greece's application for early

membership in the common market has increased awareness of electronic data processing requirements. In Turkey an attractive longer term potential exists in government data processing as the concept for large base applications develops. Expansion in the Spanish market promises to be exceptional, stimulated in part by broader and more sophisticated usage of data communications networks and also spurred by new industrial and scientific EDP applications. Trade Missions, 202-377-4456.

Petroleum Exploration, Drilling and Pipeline Equipment Exhibition. U.S. Trade Center, Mexico City. Jan. 24-26. Exhibition being held to help insure that U.S. firms receive their share of the $15.5 billion the Mexican Government will be spending on new investment in this field through 1982. Market survey summary available. C. M. Cummings, 202-377-4463.

Process Control and Instrumentation Exhibitions (Tandem). U.S. Trade Centers, Milan, Jan. 24-27, Paris, Jan. 31-Feb. 3. The Italian process control market is in continuous growth and total consumption will exceed $172 million by 1980. Imports account for over 39 percent of the total market, with the U.S. share to increase 14 percent by 1980. Italian import taxes have been revoked, making Italy a strong market for U.S. firms. French process control imports amounted to $69 million in 1976. The consumption rate is projected to increase by 9 percent annually, with the U.S. import share rising 12-14 percent. Bill McClure, 202-377-4975.

U.S. Building Products & Construction Equipment Catalog Exhibition. Rotterdam. Jan. 30-Feb. 3. Building and construction is one of the Netherland's major industries. During the period 1972-76 U.S. exports to the Netherlands of building products and construction equipment increased 100 and 155 percent, respectively, totaling nearly $100 million in 1976. Although a 2 percent decrease in annual construction of housing units is expected by 1980 (to 104,000 units), a 25 percent increase in renovation is expected in the same period. Heavy construction of waterworks and roads is expected to continue through 1980. Because building products and construction equipment are marketed generally in the Netherlands through distributors and manufacturer's agents, this catalog exhibition should be especially valuable to U.S. manufacturers of this equipment. Catalog Exhibitions Section, 202-377-3973.

Agribusiness Seminar Mission to Ivory Coast, Cameroon and Zaire. February. Will highlight advanced U.S. equipment, techniques and systems for agricultural development. Self-sufficiency in food production is a primary goal in current development plans for all three countries. Major efforts will be made to increase volume of export crops (corn, coffee, cocoa, oil palm, cotton and sugar cane). In the Ivory Coast, sugar cane was not cultivated until 1975. The Ivorian sugar cane crop is projected to exceed 2 million tons by 1980, representing a 20-fold increase. Agribusiness projects in Cameroon include $9.2 million for rice production, $7.5 million for sugar and $14.5 million for livestock. Zaire plans public expenditures of $80 million, 1975-80, to expand output production of palm oil, cotton, maize, fish, livestock. Jonnell Jacobson, 202-377-4918.

Electrical Energy Systems Seminar Mission to Taiwan, Hong Kong and the Philippines. February. Large expansion programs to increase energy production are planned in all three countries. The National Power Corp. of the Philippines has a longrange strategy to develop alternative sources of power, in addition to oil-fired thermal plants, including construction of hydro, geothermal, and coal-fired plants, plus nuclear power development. The National Electrification Administration has a goal to electrify every barrio in the Philippines by 1985, with continued U.S. AID financial assistance plus an IBRD loan of $25 million planned for late 1978. The Manila Electric Co. has projected purchases of foreign components worth $67 million from 1978-82 to meet transmission and distribution requirements. The China Power and Light Co., Ltd. plans expansion of 1,400 mw in generating facilities by 1986 in Hong Kong. Three new town projects are scheduled for completion by 1980, with need to supply a million people occupying 5,000 hectares with electricity. In addition, a 260-acre industrial estate near Taipo will require additional utility services and increase power consumption. The Taiwan Government has called for three new nuclear plants as one of ten major projects to be begun by 1980. Forward planning includes thermal and hydroelectric projects; Taiwan Power Co. is aiming for an installed capacity of 19.1 million kw in 1985. Jonnell Jacobson, 202-377-4918.

U.S. Materials Handling Equipment Trade Mission to Oman, Qatar, Bahrain. February. U.S. manufacturers and suppliers of materials handling equipment primarily associated with the construction industry, and equipment related to cargo handling (port and inland) will find good opportunities in these markets. Major projects, ongoing and projected, are centered around industrial and infrastructure development, with heavy emphasis on housing, port development and civic works. Contact Robert Bucalo, 202-377-4511.

Computers and Peripheral Equipment Exhibition. U.S. Trade Center, Tokyo. Feb. 6-10. The Japanese market for computers and peripherals is expected to expand at an average annual rate of 18 percent from $2 billion in 1975 to an estimated $4.5 billion in 1980. Japanese imports of U.S. equipment are expected to reach $375 million in 1980—a 58 percent share of the import market. Market summary and research available. Robert Levine, 202-377-4379.

Scan-Tronics (Electronic Components and Assemblies) Exhibition and Seminar. U.S. Trade Center for Scandinavia, Stockholm. Feb. 7-10. The United States is a major supplier of electronic components to the Nordic Countries—Sweden, Norway, Finland and Denmark. With a market approaching $400 million in 1976, Sweden imported $61 million of components and assemblies from the United States, which is the chief supplier of semiconductors, and a leading supplier of passive components and electronic tubes. The pace of investment is expected to increase, and U.S. technology will be in great demand. William Beiring, 202-377-3276.

International Housewares Fair, Cologne. Feb. 16-19. Conservative estimates put total houseware market in countries of Western Europe (expanded European Community, as well as Austria, Switzerland, Sweden, Norway and Finland) at $10 billion annually. Products to be exhibited at American Pavilion include: domestic machines and appliances, kitchen utensils, household and cleaning aids, incidental furniture and wicker articles, cutlery and flatware, fine metalwares and tableware articles, gift items and arts and crafts. Loretta Allison, 202-377-2905.

U.S. Building Products & Construction Equipment Catalog Exhibition. Brussels. Feb. 17-26. U.S. exports of building products and construction equipment to Belgium rose from less than $32 million in 1972 to over $74 million in 1974. Demand should continue to grow for American-made products with a reputation for technological superiority, and for home improvement merchandise such as air-conditioning equipment, electric lighting fixtures, portable power tools, and some specialized miscellaneous items. Catalog Exhibition Section, 202-377-3973.

Avionics and Aviation Ground Support Equipment Exhibition and Seminar. U.S. International Marketing Center, Singapore. Feb. 20-24. As a major commercial, banking and tourist center in Asia, Singapore must constantly expand and upgrade its airport facilities, and capabilities. Passenger traffic is projected to reach ten million by 1982, a growth of 163 percent; freight traffic is expected to increase 374 percent. New international airport is being constructed at Changi costing $528 million. George Paine, 202-377-2471.

Cardiovascular Research Seminar/Exhibit. U.S. Commercial Office, Moscow. Feb. 20-24. The Soviet Union plans to build 20 new cardiological centers during the next four years. Showpiece will be in Moscow. Reportedly, $5 million is to be spent for basic equipment. Jim Robb, 202-377-4810.

Mining and Heavy Construction Equipment Exhibition. U.S. Trade Center, Mexico City (off-site). Feb. 21-24. Mexico plans to double the production of many essential ores such as iron, copper, fluorite, and coal between 1977 and 1981. Government will complete or initiate construction on at least 10 earth-filled dams and hydroelectric projects within the next six years. Additional government plans call for initiation and completion of numerous highways and roads. To implement these plans, Mexico is expected to import almost $2.6 billion worth of mining and heavy construction equipment between 1977 and 1981. U.S. manufacturers, the suppliers of choice, will supply at least 70 percent. Mary R. Wiening, 202-377-2313.

Mining Equipment Seminar Mission to Morocco, Tunisia, Egypt. Feb. 25-March 10. Good markets exist in Morocco for shovel loaders, compressors, bulldozers, heavy-duty trucks, earthmoving equipment and related accessories. Small and medium-sized processing equipment is of special interest to Moroccan mining firms. In addition to its expanding phosphate production, Morocco is investing heavily in the exploitation of other minerals such as copper, lead, zinc and salt. Tunisia faces an urgent need to mechanize and automate its mines. A strong market exists for equipment used in both open pit and underground mining. Market prospects are particularly good in Egypt for substantial amounts of mining equipment needed to replace outdated and worn-out equipment. Phosphates, iron ore and salt are Egypt's most important minerals, which it is now beginning to produce in increasing quantities. Geoffrey H. Walser, 202-377-2973.

Machinery and Systems for Concrete Building Construction Seminar Mission, to Nigeria and Sudan. March. Construction in Nigeria is primarily concrete block or reinforced concrete. Total 1974 consumption of cement was 3.2 million metric tons. By 1980, consumption has been projected to reach 6.5 million m.t., an increase of 103 percent in six years. The building construction industry in Nigeria is expected to grow at an annual rate of 32 percent through 1980. The Sudanese Six-Year Development Plan is reportedly allocating $1 billion for housing and public utilities construction from an influx of public and private Arab capital. The lack of local man-

ufacturing facilities and equipment assures that this $1 billion investment will result in substantial export opportunities for U.S. suppliers. Geoffrey H. Walser, 202-377-2973.

Printing and Graphic Arts Catalog Exhibition. New Delhi, Bombay, Calcutta and Madras. March. The market for printing and graphic arts equipment is expected to grow at an average rate of 20 percent annually between 1977 and 1982, according to estimates based on market research in India. Imports of equipment in this product category are expected to reach $30 million in 1981. Emphasis is being placed on improved quality and efficiency, particularly for printed packaging, promotional materials, commercial stationery and trade literature. India's improved foreign exchange reserves and liberalized import control policies provide a unique marketing opportunity for U.S. exporters. Catalog Exhibitions Section, 202-377-3973.

Food Processing and Packaging Equipment Exhibition. U.S. Trade Center, Tehran. March 5-9. The Iranian processed foods industry is projected to grow 12 percent annually through 1980. Growing consumer acceptance of processed foods and various government programs designed to promote processed food production insure a growing market for food processing and packaging equipment. Iranian imports of this equipment are expected to reach $183 million by 1980. Domestic Iranian industry will be able to supply only 5 percent of requirements. Bill Monroe, 202-377-2952.

Health Care Equipment Exhibition. U.S. Trade Center, Sao Paulo. March 6-10. Demand for medical equipment in Brazil, which approached a level of $80 million in 1975, is forecast to exceed $146 million in 1980. From 1971 through 1975, medical equipment purchases increased at an average annual rate of 30 percent. This rapid growth was attributed to the availability of special federal funds for investment in health care; the modernization of private health facilities, stimulated by the expansion of social security health service contracts to private institutions; and the efforts of prominent physicians to improve medical equipment used in their institutions. G. Lincoln McCurdy, 202-377-5427.

Safety and Security Equipment Exhibition. U.S. Trade Center, Stockholm. March 14-17. Market research just conducted shows expanding demand for equipment and systems in the safety and security areas in Sweden, Norway, Denmark and Finland. Rising crime and fire rates in Sweden are expected to lead to a 46 percent market expansion to $125 million by 1980. Nearly $36 million of that market will be supplied by imports, about 29 percent of total consumption. U.S. suppliers are very competitive in the following areas: fire and burglar alarm systems, alarm system components, access control systems and sprinkler systems. Contact Jim Price, 202-377-3276.

"Printemps Informatique"—Computers & Related Equipment Exhibition. U.S. Trade Center, Paris. March 14-17. Market research recently conducted in France has spotlighted excellent sales opportunities for American manufacturers and suppliers of computers and peripheral equipment. Imports are projected to rise above the $1 billion mark by 1980, to represent about 47 percent of the total French market. American manufacturers hold a commanding 80 percent share of the installed mainframe computer base in France. Looking to the future, minicomputers are the fastest growing segment of French EDP purchases. George Ruffner, 202-377-5381.

Licensing, Investment Abroad

FRANCE—Subcontracting firm for iron and steel industry, specialized in sheet steel transformation, foundry, mechanical welding, interested in manufacturing under license and distributing in France any type of **anti-nuclear shelters and equipment for shelters.** Employs 400. Jean Guiblet, 34 Rue de Montreuil, 78000 Versailles. Telephone: 950-2649; 950-7048. P-77484.

TURKEY—Medical staff of Sagmalcilar State Hospital in Bayrampasa, Istanbul seeks to procure **x-ray machines.** Hospital treats prisoners from Sagmalcilar prison where some American prisoners are held. In addition, serves medical needs of about 500,000 poor. Hampered in current treatment of patients because of lack of x-ray equipment for stomach x-rays. Willing to purchase $50,000 of new equipment. However, is interested in obtaining used but still serviceable x-ray equipment from U.S. at lower cost. Equipment sought should have capacity of providing x-ray of both chest and stomach. Latter requires 500 million-ampere power unit. Contact American Consulate General, Commercial Section, 147 Mesrutiyet Caddesi, Istanbul. Address copies of correspondence to Overseas Products and Investment Opportunities Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77496.

1541—IRAN—Municipality of Shiraz seeks U.S. firm to build **urban refuse disposal and recycling plant,** to meet needs of current population of 500,000 and be capable of expanding. City interested in joint venture and contractor would have equity. F. Movaheddi, Mayor, Municipality of Shiraz, Iran. OPIC. Further details available from Overseas Products & Investment Opportunities Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77500.

2046 — NIGERIA — Planteau State seeks joint venture partner to establish **starch/glucose factory** using cassava flour. Would include cassava farm to supply raw material. Feasibility study completed. Estimated to cost $7.5 million, and foreign partner would take 40 percent equity share. J. Y. Lot, Permanent Secretary, Ministry of Trade and Cooperatives, P.M.B. 2059, Jos, Nigeria. P-77480.

2842, 2851—NEW ZEALAND—Seeks licenses to manufacture products for **repair and maintenance of vinyl,** such as conditioners and cleaners. D. J. Crooks, Mng. Dir., Vinyl International Pacific Ltd., P.O. Box 1160, Auckland. Telephone: 779318. P-77512.

3079—KENYA—Seeks licenses to manufacture U.S. brand name line of **plastic products** including **travel goods, luggage, sports' bags, purses, belts and related products.** Started importing above items in 1925 and established manufacturing facilities in 1968. R. M. Shah, Mng. Dir., Afrolite Industries Ltd., P.O. Box 44037, Nairobi. P-77513. OPIC.

3200—GERMANY—Well-known concerns seek 50 percent participation agreement with interested U.S. firms. Companies involved in manufacturing, finishing and distribution of **structural building materials.** MCN-Management-Consultant GmbH, Auf der Hoehe 6, 5308 Rheinbach-Scherbach, West Germany. P-77494.

3200—QATAR—Seeks collaboration with U.S. firms in **building materials field.** Particularly interested in direct sales with possibility of joint venture, supply and manufacturing to follow. Prefers contacts with large U.S. firms which manufacture and/or sell wide range of items. Language of correspondence: English or Arabic. Wasfi A. Ataya, Mgr., Donato Contracting and Trading, P.O. Box 4493, Doha, Qatar, Arabian Gulf, telephone: 21603, or write Wasfi A. Ataya, Mgr., Sun Engineering & Contracting Co., P.O. Box 5425, Dubai, U.A.E., Arabian Gulf, telephone: 7747 or 218637. P-77492.

3221 — ECUADOR — Ecuador's brewer of beer is seeking joint venture arrangement to establish plant to produce minimum of 4,000 metric tons annually of **glass beer bottles.** Joint venture conditions subject to negotiation. Ecuadorean firm basically desires that U.S. partner provide know-how and have 20-30 percent equity interest in venture. Desires to operate and manage the plant. From date of initial production, and for ten years, joint venture exempted from all income tax. For additional details contact Overseas Products & Investment Opportunities Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77488. OPIC.

3241—THAILAND—Royal Thai Government's Board of Investment (BOI) has announced approval of its proposal for expansion of Thailand's **cement industry.** BOI now encouraging filing of applications for investments in establishment of new and expansion of existing cement plants, to use Thailand's natural resources and produce minimum of 2,500 metric tons per day. Thai nationals must own 60 percent of equity in venture. Further information from Overseas Products & Investment Opportunities Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77489. OPIC.

3400—BELGIUM—Seeks license to manufacture metal products made on **cutting and stamping presses and welding machines.** Further details available from Doris Atkind, Trade Promotion Officer, European-American Bank & Trust Co., 10 Hanover Sq., New York, N.Y. 10005. P-77486.

3400—NIGERIA—Large trading company seeks to represent U.S. manufacturers of **solar drying food processing equipment.** Presently represents several major foreign firms. Keith Rayson, Representative of G. B. Ollivant, 182/184 Broad St., P.O. Box 144, Lagos. P-77497.

3411—INDIA—Manufacturer of special greases, steel barrels and drums seeks technical know-how to produce **cans and pails and in procuring machinery for reforming cans and reconditioning once-used barrels.** Proposed project envisages initial annual production of 120,000 barrels of 200/210-liter capacity, 650,000 reformed lithographed rectangular tin cans of 4-liter capacity in 178x111x235mm. size, etc. Proposed reconditioning plant will handle 30,000 once-used barrels of 200/210-liter capacity annually. V. V. Ghotge, Works Mgr., Balmer Lawrie & Co., Ltd., Containers Division, 149 Jeckeria Bunder Rd., Sewree, Bombay 400 015; telex: 011-2792;

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. WTDR request forms may be obtained from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

cable: BALMER, Bombay; telephone: 442421. P-77469. OPIC.

3433—FRANCE—Seeks to manufacture under license and/or distribute **solar heating equipment.** Employs 250, makes heating equipment. Jacques Louis, Pres. & Gen. Mgr., SACAMA, 205 Boulevard de la Grande Delle, 14000 Herouville-Saint-Clair, France: telex: 170 274; telephone: (31) 93-03-90. P-77490.

3433—MEXICO—Manufacturer and wholesaler of specialized industrial equipment seeks joint venture or licensing arrangement for manufacture of **equipment and component for heating and refrigeration industries.** Manufactures products that are stamped, cast or machined from steel, cast iron, copper, bronze or stainless steel. Produces everything from small refrigeration equipment for shrimp boats to expansion joints for gigantic thermoelectric facilities. Rodolfo Valenzuela Cuaron, Equipos Industriales Especializados, S.A., Zona Industrial Nombre de Dios, Chihuahua. Telephone: 30941. P-77470.

3442—BOLIVIA—Major construction company seeks U.S. firm to build and operate **aluminum extrusion and fabrication plant.** Would produce door frames, window frames and other construction elements. U.S. partner would invest approximately $500,000. Annual production desired is about 1,000 tons. Empresa Constructora Inchauste Zarate & Cia., Casilla 6037, La Paz. P-77481. OPIC.

3494—INDIA—Government-owned refinery seeks technology to produce liquefied petroleum gas (LPG) **valves and regulators** for use in 15 kilogram-gas cylinders. Plans to make valves and regulators for LPG cylinders having mixture of commercial butane and propane with vapor pressure of 16.9 KGF/CM to power of 2G at 65 degrees centrigrade and total volatile sulfur of 0.02 percent by weight. There is no hydrogen sulphide in the LPG. Currently supplies LPG to Bombay and other areas. K. Balgangadharan, Bharat Refineries Ltd. (BRL), P.O. Box 1725, Bombay 400 001. Cable: BHAREFIN; telex: 011-2758. Further information including specifications available from Overseas Products & Investment Opportunities Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77471. OPIC.

3523 — AUSTRALIA — Interested in importing and manufacturing under license **components for agricultural spraying machinery.** Medium-sized producer of spraying equipment, also has franchise for Datsun automobiles. Annual sales about $1.1 million. John E. Richards Machinery, 1-3 North Australian Rd., St. Arnaud, Victoria 3478. P-77472.

3535 — AUSTRALIA — Seeks license or joint venture to make **machinery for handling bulk materials in powder form.** Interests include **grinding machines, pneumatic conveyors and hammer mills.** Representative of Australian firm plans visit U.S. in January to meet with interested firms. M. Sebastian, Mng. Dir., Aerolux Engineering Pty. Ltd., 955 Pacific Highway, Pymble, N.S.W. 2073. P-77473.

3537—FRANCE—Seeks licenses to produce **industrial trucks operated by magnetic system on floor for assembly lines.** Currently produces material handling equipment and conveying systems. Employs 230, annual sales $80 million. Good reputation. Mr. Duclos, Ets. J. Berthelat et Fils, 13 rue Saint Ambroise, 75011 Paris; telex: 692 122F; telephone: 933-0660. P-77474.

3544 — CANADA — Private organization has been engaged by provincial government to conduct study into feasibility of establishing plant to manufacture **primary production equipment, parts or ancillary equipment for plastics industry.** One area of interest is manufacture of **molds and dies.** Compiling list of potential investors who possess proven expertise in related manufacturing, or are willing to consider financial backing of such an undertaking. For further details contact Robertson, Nickerson Group Associates Ltd., Consulting Engineers, 56 Sparks St., Ottawa, Ontario K1P 5A9. P-77478.

3585—UNITED KINGDOM—Seeks to expand present line. Is manufacturer of axial and inline centrifugal fans, radiator cooling systems, screw compressors and air-conditioning systems for military vehicles and aircraft. Particularly interested in licensing arrangement for production of **air handling units or central stations** but would also consider other products associated with air movement. Established 1923, employs 760. John Widdowson, Mgr., Heat Transfer Division, Ariscrew Howden Ltd., Weybridge, Surrey, KT15 2QR. P-77485.

3589, 3823, 3811—FRANCE—Seeks licensing arrangement with U.S. firm to produce **water purification equipment, water quality monitoring and control systems, and water testing apparatus.** Presently produces water purification equipment and water adduction pipes. Established 1960, employs 330. Mr. Bechu, Pres., Societe De Genie De L'Ouest, Kervarsenec, 56270, Ploemeur, France. P-77491.

3589 — INDIA — Seeks representation or possibly licensing agreement for following **air pollution equipment:** cyclone separators and mechanical centrifugals, atomizing and mechanical scrubbers, baghouses, electrostatic precipitators, catalytic equipment, direct-flame fume incinerators, absorption equipment. Also interested in producing spray nozzles under license. Leading manufacturer and distributor of air-conditioning, refrigeration and power plant equipment. M. V. Bhagwat, Vice President, Industrial Projects Division, Blue Star Ltd., Sahas, 414/2 Veer Savarkar Marg, Prabhadevi, Bombay 400 025. WTDR. P-77475. OPIC.

3600 — KUWAIT — Newly-formed firm seeks to represent U.S. suppliers and producers of **motors, valves, pumps and other components for petrochemical and desalination plants.** Murad Trading Co., P.O. Box 3613, Safat, Kuwait. P-77476.

3613—INDIA—Seeks license to produce 11 **KV circuit breakers** in range of 400/630/800/1250 amps with breaking capacity of 250/350/500 MVA. Initially plans to produce 200 breakers annually, increasing to 500 by fourth year. Currently makes distribution transformers, switches, rectifiers and other equipment mainly for power industry. M. C. Shah, Mng. Dir., Power & Control Transformer Industries Private Ltd., (PACTIL), 6 Feltham House, 10 Graham Rd., Ballard Estate, Bombay 400 038. P-77479. WTDR. OPIC.

3641 — SPAIN — Large manufacturer of **fluorescent and incandescent electric lamps** seeks joint venture to expand production. Plans to build additional plant at cost of around $1.2 million. Needs $500,000 in capital investment, could be in form of machinery and equipment. U.S. firm offered equity participation. Currently makes 15 million incandescent and flourescent lamps annually valued at $4.4 million. Reports that domestic market potential for various types of lamps is 400 million units. Also export possibilities to Middle East. Julio Rodriguez Fernandez, Mgr., Iria S.A., San Roque 41, Villagarcia de Arosa, Pontevedra, Spain. WTDR. P-77477.

3731—AUSTRALIA—Seeks licensing arrangement and technical assistance to manufacture **high-speed outboard or stern drive aluminum barges** for passenger and goods transport and fishing. Presently produces barges and speed boats. G. Goody, Mng. Dir., Goody Engineering Works Pty. Ltd., Rockhampton Rd., Yeppoon, 4703 Queensland. WTDR. P-77493.

3823—ISRAEL—Manufacturer of fine precision instruments used in widely differing industrial and scientific applications, seeking joint venture arrangement for manufacture of **precision electro-mechanical instrumentation and systems.** Proposes to manufacture for joint marketing to EEC countries and worldwide. As of July 1, Israeli-manufactured products enjoy duty-free access to EEC. Employs 180. Subsidiary of Kulicke and Soffa Industries, Inc., Horsham, Pa. Dan Kahan, Mng. Dir., or Larry Maltin, Marketing Mgr., Kulso Ltd., Advanced Technology Center, P.O.B. 875, Haifa. WTDR. P-77499. OPIC.

3841, 3842—FRANCE—Seeks licensing arrangement with U.S. firm to produce **orthopedic instruments and appliances and prosthetic appliances.** Established 1949. Correspondence may be in English. Yves Picant, Marketing Dir., Midy, Societe Francaise De Fournitures Chirurgicales, 62 Boulevard Arago, 75013 Paris. P-77498.

6131 — NIGERIA — Plateau State desires foreign participation in establishing **agricultural cooperative bank.** Twenty percent

of loans will be for agricultural purposes, remainder will be commercial loans. State will contribute $3 million. J. Y. Lot, Perm. Secr., Ministry of Trade and Cooperatives, P.M.B. 2059, Jos, Plateau State, Nigeria. P-77483.

8062—SAUDI ARABIA—Firm seeks joint venture partner to establish modern **hospital.** Will have 150 beds for general patients, 150 for special patients and 100 for pediatric cases. U.S. partner would design and plan hospital and procure all medical equipment and furnishings. Cost approximately $250 million. Overseas Products & Investment Opportunities Staff, Office of Export Development, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77482. OPIC.

Zaire Invites Participation In Developing Its Industries

The Republic of Zaire has listed projects for which it is actively seeking foreign investors. These include the production of: electrolytic manganese, iron ore sponge, bituminous coal, methane gas, ferro-tungsten, tin, ferro-manganese carbide, ferro-silico manganese, ferro-silicium, sodium carbonate, caustic soda, soap powder, salt, glycerine, reserpine, alkyd resin, yeast, pigments, citric acid, aminoplastic resins, ammonia, nitrate and phosphate fertilizers. Interested parties contact the Direction des Investment, B.P. 12279, Kinshasa. The Economic / Commercial Section of the American Embassy, 310 Ave des Aviateurs, Kinshasa, telephone 25881, (c/o APO New York 09662) will be glad to assist prospective investors in determining the status of these projects and aid them in following up inquiries. Certain projects may qualify for OPIC insurance programs. P-77487.

Israel Plans Industry Week

Israel is putting together a large-scale industrial exposition for the purpose of bringing together foreign business representatives with Israeli government and industrial leaders. Called "IsraTech '78", the event seeks to attract Americans and Europeans interested in selling, subcontracting, licensing technology and investing, in the fields of metalworking and electronics, including aerospace and defense applications. Participants will be given an opportunity to tour Israeli plants and research institutes.

Sponsored by the Government of Israel, "IsraTech" will take place at the Jerusalem Convention Center, June 4-8, 1978. Additional information about the event is available by writing "IsraTech '78", Government of Israel, 641 Lexington Ave., New York, N.Y. 10022; phone 212-486-8554.

Bahrain Wants Library Items

A large architectural, engineering and planning company in Bahrain desires inquiries from U.S. firms producing systems and equipment for use in modern libraries. Products of interest include computer systems for handling books and card indexing; money-changing machines; electrical and electronic audio-visual systems; lighting systems; airconditioning and sound systems. Additional information available from Sabah Al-Bader, Makiya Associates, P.O. box 667, Manama, Bahrain; telex: 8468GJ. P-77495.

Direct Sales

The following trade opportunities are based on reports received from the U.S. Foreign Service—Department of State by the Trade Opportunities Program, Room 2323, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest indicated by codes 0111-1799 and 4011-8999 are based on the Standard Industrial Classification Manual, 1972; codes 20 through 39 come from Numerical List of Manufactured Products (New 1972 SIC Basis), MC72-1, 2. Codes beginning with 99 are from the TOP coding system.

U.S. firms should be aware that the listing in Commerce America *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Department's Export Administration Regulations. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency.

Coke

2819998—EGYPT—1,000 metric tons coke (charcoal) required. International tender will be called in near future. Reply to—George Matragi, Mgr., P.O. Box 781, Alexandria. Cable GIMATRA ALEXANDRIA; tel. 66584.

Fabricated rubber products

3069585—EGYPT—Supply of the following—70 rubber speed boats of different sizes driven by outboard motors. 150 life rafts fully equipped, operated by hydrostatic release. Price quotations requested for Alexandria. Catalogs also required. Reply to—Abdalla Ahmed Weheda, Chairman, Alexandria Co. for Engineering & Intl. Agencies, 681, Ave. El Horreya, Giannaclis, P.O. Box 1151, Alexandria, Egypt. Cable AGENCYTEX; Tel. 69480.

Glass, glassware

● **3221013-32, 2834100-4200-4300-4400-4500, 384100—TANZANIA**—Supply of different types & quantities of following infusions—dextrose, darrow 1 solution, ringer lactata acc. to Hartmann, molar sodium lactate, normal saline, neo-plasmagel, infusion sets & blood bank glass bottles. Docs. available from Dept. of Commerce, TOP, Rm. 2321, Wash., D.C. 20230; tel. 202-377-2251. Submit bids to—Secretary, Central Tender Board, P.O. Box 49, Dar Es Salaam. Refer to bid no. 35 1977/78. Bid deadline Oct. 14.

Steel mill products

● **3312019—THAILAND**—2,000 units locomotive wheels, must be open hearth or electric furnace steel with following chemical composition—sulphur not to exceed 0.04 percent, phosphorus not to exceed 0.04 percent, manganese between 0.50 & 0.75 percent, carbon between 0.60 & 0.75 percent, silicon between 0.15 & 0.35 percent. Financed with govt. funds. Tender docs. available at $2.50 per set from Superintendent, Store Bureau, State Railway of Thailand, Yose, Bangkok. Refer to bid no. 20213. Deadline Oct. 19.

Fabricated structural metal products

● **3441381, 9914107—ALGERIA**—Supply & mounting mobile bridges to equipment buildings of Parachevement Zone Est of steel complex at El Hadjar, Annaba (E. Algeria). Tender docs. 800 DA ($193.88) and must be obtained from address below prior to submitting offers. Offers to remain valid 90 days past bid deadline. Offer & corres. in French required; all specs. metric. Division Marches, SNS, Direction Travaux Neufs Usine D'El-Hadjar, Annaba. Refer to bid no. SW 2001. Bid deadline Nov. 15.

Engines, turbines

● **3511100, 3612000, 9918102—ICELAND**—Hydroelectric electro-mechanical equip. for new 140 mw hydro-power plant at Hrauneyjafoss on River Rungnaa in So. Iceland with optional extension by 70mw. Contract document 304 covers turbines, generators, transformers, switchgear, control equipment, etc., contract document 305 covers penstocks, gates & cranes. Bids may be submitted on 1 or both of 2 contract documents. Offers of long-term financing arrangements covering equip. supplies appreciated & terms of such arrangements will be taken into account when comparing tenders. Contract docs. available upon written application to Natl. Power Co. with nonrefundable payment of $250 for each contract document (304 & 305), total of $500. Additional sets $100/set. Financed by Govt. of Iceland & city of Reykjavik. Refer to—Hrauneyjafoss Hydroelectric Project. Bid deadline Dec. 16. Write or telex to—Eirikur Briem, Gen. Mgr., The Natl. Power Co., Sudurlandsbraut 14, 105 Reykjavik. Cable LANDSVIRKJUN; tel-86400; telex 2054 LANDSV IS.

● **3519300—BURMA**—(1) Supply 20 160-BHP marine diesel engines complete with gear box, bid no. 15 SGN.EP. (2) Supply four 160-BHP marine diesel engines complete with gear box, bid no. 16, SGN.FP. U.S. Embassy Rangoon will forward copies bid invitation & specs. to interested U.S. firms on request, citing T-0121, and/or T-0122, enclosing check for $8 per set, for each item, drawn on U.S. bank, payable to U.S. Embassy, Rangoon. Docs. must be obtained prior to submitting offers. Submit bids to—Gen. Mgr. (Engineer), Timber Corp., Ahlone P.O., Rangoon. Refer to bid nos. above. Bid deadline Oct. 17.

Construction, mining, materials handling machinery, equipment

● **3531100-1400-1700-1800, 3541800, 3811331 —SOMALIA**—Mfrs. & suppliers of earth-moving machinery, tractors, lorries, workshop equip., caravans & surveying equip. invited to write to project manager, address below & obtain bid docs prior to submitting offers. Somali Govt. has been granted credit for purchase of above equip. by International Dev. Assoc. Obtain bid docs. from—Project Implementation Unit, N.W. Region Agricultural Dev. Project, P.O. Box 9, Hargeisa. Bid deadline Oct. 15.

● **3531220-1100-1219—BURMA**—Supply 2 crawler tractors 270 to 300 HP with ripper attachment, bid no. 1.SGN.FP, T-0107. 2 crawler tractors 180 to 200 HP with ripper attachment, bid no. 2.SGN-FP, T-0108. 20 crawler tractors 140 HP with winch, bid no. 3.SGN.FP, T-0109. Two 140 HP 4-wheel-drive tractors with towing attachment, bid no. 6.SGN.FP, T-0112. Financed with ADB credit. U.S. Embassy Rangoon will forward copies bid invitation & specs to interested U.S. firms on request, enclosing check for $8/set for each item, drawn on U.S. bank, payable to U.S. Embassy, Rangoon. Docs. must be obtained prior to submitting offers. Submit bids to—Gen. Mgr. (Engineer), Timber Corp., Ahlone P.O., Rangoon. Refer to bid nos. above. Bid deadline Oct. 17.

● **3531407—EGYPT**—Supply 2 self-propelled floating cranes 35 tons capacity. Contact agents in Egypt for complete conditions & specs. of this tender, which may be obtained from below address against payment of $100. Financed by World Bank loan. Obtain bid docs from—Chairman, Alexandria Port Authority, 106 Ave. Gamal Abdel Nasser, Alexandria. Tel. 34321. Bid deadline Oct. 17.

● **3531820-1830-1710-1900—BURMA**—1) Supply four 125-HP motor graders, bid no. 4.SGN.FP. 2) Supply 2 self-propelled grid rollers, bid no. 5-SGN.FP. 3) Supply two 130-HP wheel-type articulated tractor shovels, bid no. 7.SGN.FP. 4) Supply thirty 7.5 m/ton wheel-type articulated log loaders with winch, bid no. 8.SGN.FP. 5) Supply forty 125-HP log skidders, bid no. 9.SGN.FP. Financed with ADB credit. U.S. Embassy Rangoon will forward copies bid invitation & specs. to interested U.S. firms on request, citing T-0110, T-0111, T-0113, T-0114, and/or T-0115, enclosing check for $8 per set for each item, drawn on U.S. bank, payable to U.S. Embassy, Rangoon. Docs. must be obtained prior to submitting offers. Submit bids to—General Manager (Engineer), Timber Corp., Ahlone P.O., Rangoon. Refer to bid nos. above. Deadline Oct. 17.

● **3534005-07-10—YUGOSLAVIA** — For new radio-TV center, Zagreb—6 elevators for 20 persons, or 1370 kgs; 2 elevators, 13 persons, 910 kgs; 1 elevator, 6 persons, 450 kgs; 1 elevator, 23 persons, 1590 kgs; 1 elevator, 3630 kgs; 6 winches 55 kgs. Suppliers must offer equip., design, warranty on performance & quality, price, delivery deadline, instructions for use & maintenance, references, tech. documentation & literature (bid must be in English & translated in Serbo-Croatian). Foreign bidders should be prepared to associate with Yugoslav enterprise in this project. Docs. & more details (project design) available against payment of 5,000 dinars or equivalent into account with Privredna Banka Zagreb, & must be obtained prior to submitting offers, from—Gradiliste RTV-Centar, G.P. Hidroelektra, Leskovacka 10, PP 247, 41001 Zagreb. Refer to bid no SL 40/77. Bid deadline Nov. 3.

Metalworking machinery

● **3541000—EGYPT**—Supply equip. & tools for training centers. Tender docs., incl. specs. & equip., must be purchased by payment of LE 100 or US $150, prior to submitting offers. All offers must be accompanied by bid bond of 2 percent of total value. Bond must also be valid to March 1, 1978 & subject to extension. Project financed by Intl. Dev. Assoc. (IDA) of IBRD. Obtain bid docs from—Ministry of Housing, Executive Committee Training Organiz., 1, Ismail Abaza St., 13th Floor, Garden City, Cairo. Refer to tender no. 1. Bid deadline Nov. 1.

● **3541000, 2899541—TANZANIA**—62 sets carbide insert blade bits of various sizes; mission mega drill tools & bits of various types; 15 tricone roller bits; 177 drill pipes of different sizes; 80 drill string handling tools; 60 chain pipe wrenches & 60 sets of jaws; 360 drilling fluid additives; drilling mud testing equip.; miscellaneous materials incl. water level indicator, 50 spare cable of 100M length, 6 hydraulic jacks of 2 ft. stroke & 50 ton lifting capacity; grinding & cutting tools of different sizes. Tenderers should state that total value would be imported (foreign component). Obtain bid docs. prior to submitting offers, from—Secretary, Central Tender Board, P.O. Box 49, Dar Es Salaam. Refer to—No. 8 (MAJI). Bid deadline Oct. 13.

● **3541000-45000-46000 — TANZANIA** — Supply various workshop training equip. Financed by IBRD. Docs. available from Dept. of Commerce, TOP, Rm. 2321, Wash., D.C., 20230; Tel. 202-377-2251. Value of tender $9 million. Submit bids to —General Mgr., Sugar Development Authority, P.O. Box 4355, Dar Es Salaam. Refer to bid no. KSC/NSI/77. Bid deadline Oct. 15.

Important Notice

Most member countries of the League of Arab States employ a secondary boycott against foreign firms which undertake certain specific types of business relationships with the State of Israel. The Commerce Department will not disseminate nor make available for inspection any tenders or trade opportunity documents which contain conditions intended to support such boycotts, or which are based on documents known to contain such provisions. Trade or investment opportunities published herein are not presently known to be subject to such conditions. However, it is possible that U.S. firms responding to opportunities from Arab countries may be asked at some stage of a transaction to participate in an Arab boycott-related restrictive trade practice as defined in the Department's Export Administration Regulations (15 CFR, Part 369 et. seq.).

Firms are reminded that it is the policy of the United States (a) to oppose restrictive trade practices or boycotts fostered or imposed by foreign countries against other countries friendly to the United States, and (b) to encourage and request U.S. concerns engaged in the export of articles, materials, supplies, or information to refuse to take any action, including the furnishing of information or the signing of agreements, which has the effect of furthering or supporting such restrictive trade practices or boycotts. Accordingly, U.S. concerns receiving such requests to participate in a restrictive trade practice or boycott are encouraged and requested to refuse to comply with them.

Firms are further reminded that U.S. concerns receiving requests to participate in a restrictive trade practice or boycott must report such request to the Department of Commerce in accordance with Section 369.4 of the above-cited regulations.

Special industry machinery

● **3551261-70-87-91 — ALGERIA** — Construction of 2 bread-yeast factories (turnkey), with capacity of 15,000 tons/yr. each. Offer & corres. in French; all specs. metric. Tender docs. may be obtained for 200 DA (US $48.46) from Direction De Developpement, Sn. Sempac, 26, Rue Ayachi Mohamed (Ex Rue De Suez), Belcourt, Algiers. Bid deadline Nov. 26.

Office, computing, acct. machines

● **3573100-200—ECUADOR**—Central Bank wishes to purchase or lease date processing equip. Basis for proposals, tech. specs, & other docs. must be obtained from below address for non-reimbursable 5,000 sucres (U.S. $200) prior to submitting offers. Min. performance guarantee of 2 percent of total proposal must be in Spanish. Obtain bid docs from—Secretaria Del Comite De Licitaciones Y Concurso De Ofertas, Banco Central Del Ecuador, Av. 10 De Agosto Y Briseno, Quito. Bid deadline Nov. 7.

● **3573200-3300 — ALGERIA** — Supply of data processing equipment for research center. Bid deadline has been extended to Oct. 20. Obtain bid docs. from—Dir. De La Normalisation et De La Reglementation, Commissariat National A L'Informatique, Route Nationale No. 5, Cinq Maisons, El Harrach, Algiers. Refer to bid no. 15-77.

Service industry machines

● **3589281-91, 3561000 — URUGUAY** — Water purification pumping station equip., 90 cu. meter/hr. cap., & instrument panels. Financed with IDB loan. Bids must include c.i.f. Montevideo prices & interested parties should enter bids through local foreign factory reps. Obtain specs. prior to submitting offers from—Administration De Las Obras Sanitarias Del Estado (OSE), Carlos Roxlo 1275, Seccion Licitaciones, Piso 3, Montevideo. Refer to bid no. 1360. Bid deadline Oct. 18.

Communications equipment

● **3661161 — ETHIOPIA** — Manual telephone exchange 35 pcs. of 20 number & 15 pcs. of 50 number. Price must be c.i.f. Assab for shipment by ocean freight with insurance paid up to Addis Ababa, TSE's warehouse. Bid bond of Birr 2,000 by first class bank or insurance co. required & must accompany bid. Payment shall be made from IDA-granted loan, 90 percent of each shipment 45 days after receipt of shipping docs. against draft, 10 percent of contract value upon expiry of 1 yr. Guarantee as from date equip. received. Bid docs. available at room no. 201, Gen. Mgr., Telecommunications Service of Ethiopia, P.O. Box 1047, Addis Ababa. Refer to bid no. 12/77. Bid deadline Nov. 10.

● **3661200—INDIA**—PLCC & teleprinting equipment mosaic board & other associated accessories for W. Bengal State Electricity Board transmission & distribution project. Tender docs. available for RS 100 (U.S. $11.53) from Deputy Chief Engineer (Stores & Purchase), West Bengal State Electricity Board, 13 Camac St., Calcutta 700017. Refer to bid no. IDA-IV/WBSEB/7. Bid deadline Nov. 14.

● **3661230—ETHIOPIA**—Telephone instrument sets, 20,000 pieces, desk-type with automatic transmission regulating device for connection to automatic exchange with feeding voltage 48 volts, feeding bridge 2x400 ohms. Price must be c.i.f. Assab for shipment by ocean freight with insurance paid to Addis Ababa, TSE's warehouse. Bid bond of Eth. birr 2,000 by first class bank or insurance co. required & must accompany bid. Payment shall be made from IDA-granted loan, 90 percent each shipment 45 days after receipt of shipping docs. against draft, 10 percent contract value upon expiry of 1 yr. guarantee from date equip. received. Bid docs. must be obtained prior to submitting offers, from—General Manager, Telecommunications Service of Ethiopia (TSE), P.O. Box 1047, Addis Ababa. Refer to bid no. 10/77. Deadline Nov. 8.

● **3662100 — PHILIPPINES** — 4-channel UHF radio tranceivers; 26 base station transceivers; 50 vehicle transceiver units; 10 hand-held portable units, ancillary equip. & spare parts. Bids in quadruplicate for supply, delivery & installation of various communications & ancillary equip. at designated locations in Manila area. Bid docs. may be examined free at Metropolitan Waterworks & Sewerage System (MWSS), rm. 300, 176 Arroceros St., Manila. Obtain docs. prior to submitting offers from Project Management Off., Manila Water Supply Project, address below, or P.O. Box 1252 MCC, Makati, Metro Manila. Non-refundable payment of P250 in cash or check payable to MWSS will be required for each set of bid docs. Each bid must be accompanied by bid surety in amount equal to not less than 3 percent of total bid price. MWSS has entered into agreement with Asian Dev. Bank for loan in various currencies toward cost of Manila Water Supply Project. Procurement under this contract is, therefore, limited to equip. from member countries of Asian Dev. Bank & Luxembourg. Bid deadline Oct. 25. Obtain bid docs from—Rm. 203, ITC Bldg., 337 Buendia Ave. Ext., Makati, Metro Manila. Cable MWSS MANILA; tels. 47-19-01, 49-23-77.

● **3662100—SINGAPORE**—Supply & delivery of 2 remotely controlled 10 kilowatts peak envelope power, independent side-band transmitters, for radio telephone & radio telegraph traffic for maritime services. Should be suitable for unattended remotely controlled operation. Following tech. specs. must be met—synthesized controlled transmitter required. Frequently increments of synthesizer to be such that frequency radiated by transmitter can be adjusted in steps of 100 HZ. Frequency range 2 mhz to 30 mhz. Frequency stability—equal to or better than plus or minus 1 part in 10 (8th power). Transmitter to be capable radiating type A3A, A3J (usb/lsb), A3B (isb), A3H (compatible AM). Selection of –26 db, –16 db & suppressed (–50 db) should be provided. Transmitter should be continuous tuning type with no bandy-sitches. Transmitter should have peak envelope power of 10 kw & 5 kw average. Output circuit of transmitter should be 50 omhs unbalanced. Output load v.s.w.r. —at full power should be better than 2-1. Meter to be provided to indicate forward & reflected power. Spurious & harmonic emission—less than 50 milliwatts relative to full power. Hum level—better than –55 db relative to full power. Intermodulation distortion—not less than –36 db on standard 2 tone test. Automatic tuning time—should not exceed 10 to 15 sec. Transmitter should be able to operate on 380 to 440 v. a.c., 3-phase, 50 hz, 4-wire system. 1 wide band balum transformer having 50 omhs unbalanced/600 ohms balanced required. 20 meters 50 ohms coaxial cable, suitable for transmitter, with connectors (2 nos) to terminate this coaxial cable at transmitter & at balum transformer required. Local & remote control facilities required for transmitter. Tender docs. available from Douglas W. H. Ting, address below, upon payment of S$1,000 (approx. US$400) deposit. Bid docs. must be obtained prior to submitting offers, from—Head, Purchasing, Radio & Transmission Dept., Telecommunication Auth. of Singapore, 68 Orchard Rd., Singapore 9. Refer to tender no. PT/97/77(Y). Bid deadline Oct. 14.

● **3662100 — MALAYSIA** — 1,500 lightweight VHF (FM) section radio stations for Malaysian Ministry of Defense. Pernas Wakil is member of Pernas group of companies (govt. agency). Obtain tender docs. from below address for M$50 (US$1-Approx M$2.45). Pernas Wakil does not normally send docs. to prospective overseas suppliers. Interested party therefore advised to get in touch with local agent or rep. in order to obtain docs. Write to—Executive Dir., Pernas Wakil Sdn. Berhad, Japan Sultan Isnail, P.O. Box 2172, Kuala Lumpur. Refer to tender no. PW/KP/19/77. Bid deadline Oct. 20.

Motor vehicles, equipment

● **3711200, 3713100—BURMA**—(1) Supply 100 4x4 or 4x6, 15-ton logging trucks with trailer, bid no. 11.SGN.FP, T-0117. (2) Supply 10 6x4, 20-ton logging trucks with trailer, bid no. 12.SGN.FP, T-0118. (3) Supply 32 4x4 inspection vehicles, bid no. 14.SGN.FP, T-0120. Supply 24 10-ton capacity dump trucks, bid no. 10.-SGN.FP, T-0116. (5) Supply 16 fuel bowsers, 1,600 gallon capacity, bid no. 13.SGN.FP, T-0119. U.S. Embassy Rangoon will forward copies bid invitation & specs. on request; enclose check for $8 per set for each item, drawn on U.S. bank, payable to U.S. Embassy, Rangoon. Docs. must be obtained prior to submitting offers from Gen. Mgr. (Engineer), Timber Corp., Alhone P.O., Rangoon. Refer to bid nos. above. Bid deadline Oct. 17.

Railroad equipment

● **3743245—MEXICO**—125 railroad cabooses. Financed by IBRD loan. Specs. available for 500 pesos (approx. $22.25) from—Gaspar Hernandez Topia, Subgerente De Adquiciones, Ferrocarriles Nacionales De Mexico, Avenida Colonia Gerrero, Mexico 3, D.F. Tel. 905-547-6273. Refer to bid no. BIRF 08. Bid deadline Oct. 21.

Costume jewelry, novelties, notions

3964265—NETHERLANDS—Needles for household sewing machines. Established 1917, employs 100, mfr. of cotton & synthetic sewing threads. Financial ref.—Algemene Bank Nederland N.V. Reputable firm. Recommended as trading partner. Reply to—A. Le Noble, Mfg. Dir., B.V. Garenfabriek Bieze, Stork & Co., P.O. Box 22, Nijverdal. Telex 44457; tel. 05486-12268.

Construction

● **9912100, 3661153-177-200—MADAGASCAR**—Supply & installation automatic telephone central office for Antananarivo as follows—dial automatic telephone switching equip. (central off. & PBX, A & B & toll) with telephone central off. switching equip.—toll switching, automatic & telephone carrier equip. & repeater with data concentrators. Equip. for Analakely 2 project, new automatic telephone central off. which is to function in compatibility with existing central urban system, Analakely 1. Analakely 2, object of present tender, to be installed in order to normalize 80 percent over-saturated existing central off. Initially anticipated to take over 3,000 subscribers from previous system. Will assure urban traffic between several centrals in Antananarivo city & immediate surroundings. Must have initial cap. 8,000 to 12,000 lines & final cap. 30,000 lines, of which 20,000 subscribers connected directly to central off. & 10,000 subscribers connected to satellite centrals located among Antananarivo agglomeration & its surroundings. Bidding docs. in French containing bid procedures & equip. specs. must be obtained from Monsieur Le Directeur Des Telecommunications, below address, prior to submitting offers. Bidder may submit 1 or several bids corresponding to different types of equip. Language corres. French. Refer to "Fourniture Du Materiel Et L'Installation D'Un Central Telephonique, Automatique Dans La Ville D'Antananarivo". Obtain bid docs. from—Bureau Des Affaires Generales, (Porte 210), Ministere Des Postes & Telecommunications, Antaninarenina, Antananarivo, Madagascar. Bid deadline Oct. 12.

● **9911201 — GUATEMALA** — Construction, equipping & complete turn-key functioning of 3 100-bed health centers, 2 50-bed health centers & 7 30 bed Type A health centers. Construction open only to firms from eligible member countries of IDB which have prequalified. Buildings will be located in different parts of following depts.—Totonicapan, Baja Verapaz, El Peten, Chimaltenango, El Progreso, El Quiche, Alta Verapaz. Above health centers will cover following basic specialties — surgery, medicine, obstetrics & pediatrics. Complete installations for normal functioning required to be technologically adequate, but of non-complicated operation & maintenance. Reference will be given to prefabricated or accelerated type construction. Regulations, specs. plans & other docs. must be obtained from Unidad Ejecutora De Salud Rural, 5A Avenida 13-27, Zona 9, Guatemala City, prior to submitting offers. Financed in part by Interamerican Dev. Bank loan 468/SF-GU. Submit bids to—Departamento De Bienes Del Estado, Y Licitaciones, Edificio Del Min. De Finanzas Publicas, Piso 13, 8A. Avenida Y 21 Calle, Zona 1, Guatemala City. Refer to bid no. 46-77. Bid deadline Oct. 16.

● **9911201—GUATEMALA**—Firms invited to prequalify to bid for 65 health posts & 14 type B health centers. Only firms of eligible member countries of Interamerican Dev. Bank invited. Project requires execution of civil work & acquisition & installation of equip. Health posts are of simple construction, with approx. area 115 sq. meters. Type B centers have approx. constructed area 364 sq. meters & foresee min. no. of beds. Bid comprises 3 geographical zones divided into 9 groups.

Grants will be made by groups & interested parties may participate in one, two, etc. or 9 groups. Group I—Dept. Chimaltenango, 9 health posts & 1 type B health center; Group II—El Quiche, 4 posts & 4 type B centers; Group III—Totonicapan, 6 posts & 1 type B center; Group IV—El Progreso & Baja Verapaz, 8 posts & 3 type B centers; Group V—Alta Verapaz, 8 posts & 1 type B center; Group VI—Alta Verapaz, 7 posts & 2 type B centers; Group VII—El Progreso & Baja Verapaz, 8 posts & 1 type B center; Group VIII—Baja Verapaz & Alta Verapaz, 8 posts & 1 type B center; Group IX—El Peten, 7 posts. Regulations, specs.. plans & other bid docs. available from Unidad Ejecutora De La Obra Fisica, 15 Calle 11-41, Zona 1, 2 Piso, Guatemala City, & must be obtained prior to submitting offers. Offers must be in Spanish. Project partially financed by IDB. Submit bids to—Departamento De Bienes Del Estado Y Licitaciones, Edificio Del Ministerio De Finanzas Publicas. Piso 13, Avenida Y 21 Calle, Zona 1, Guatemala City. Refer to bid no. 47-77. Prequal. deadline Oct. 13.

● **9911201—GUATEMALA**—Previous notice reported incorrectly that only prequalified firms could bid on construction of three 100-bed, two 50-bed & seven 30-bed hospitals that compose largest part of Guatemala's multi-million dollar rural health project financed in part by $28 million IDB loan. Embassy has now been told that firms not already prequalified may submit bids by Oct. 17 & that complete instructions on doing so are available from Unidad Ejecutora De Salud Rural, 5A. Avenida 13-27, Zona 9, Guatemala City. As stated before, preference will be given to prefabricated or accelerated type of construction. Submit bids to — Departamento De Bienes Del Estado Y, Licitaciones Edificio Del Ministerio De Finanza Publicas, Piso 13, 8A. Avenida Y 21 Calle, Zona 1, Guatemala City. Refer to bid no. 46-77. New bid deadline Oct. 17.

● **9912101-201—IVORY COAST**—As part of jointly financed IBRD & govt.'s Office of Posts & Telecommunications Project, Telecommunications Extension & Modernization Program-Objective 1978—Pemto 78, govt. has called for tenders on power supply stations, batteries, special current generators, ac/dc voltage converters & dc/ac voltage converters. Complete specs. must be obtained prior to submitting offers from—Direction Gen. De Telecommunications, Min. Post & Telecommunications, Abidjan. Cable DIRGETEL-ABIDJAN; tx 758 ABIDJAN. Bid deadline Nov. 10.

● **9913399 — ALGERIA** — Construction of plaster mfg. complex, turnkey contract, at M'daourouch, province of Guelma. Tender docs. cost 200 DA ($48.27) & must be obtained from address below prior to submitting offers. Offer & corres. in French required; all specs. metric. Div. Engineering et Developpement, S.N.M.C., Project Platre, B.P. 90 Rue De Constantine, Kouba, Algiers. Bid deadline Oct. 31.

● **9913399 — ALGERIA** — Construction of grass-seed factory (turnkey), capacity 10,000 tons/yr. Offer & correspondence in French required; all specs. metric. Tender docs. available for 200 DA (US $48.46) from Direction De Developpement, Sn. Sempac, 26, Rue Ayachi Mohamed (Ex Rue De Suez), Belcourt, Algiers. Bid deadline Nov. 26.

● **9914105, 3547229-335, 3559581, 3567121-261—YUGOSLAVIA**—Equipment for production heat treated welded tubing in protected dx gas asmosphere. Dia. range from 10x0.8 to 26x1.5 mm. Annealing cap. 12,000 m/t per year at 700 deg. centigrade. Normalization cap. 7,000 m/t at 920 deg. centigrade. Equip. for production of cold drawn steel welded tubing, 5,000 tons/yr. Equip. for testing steel welded tubing for use in fluid power applications, 10,000 tons/yr. Above equip. incl. electric furnaces; equip. for heat treating, pickling, cleaning & degreasing; levelers; shears & saws; tube-end machining equip.; hydraulic presses; internal weld cleaning equip., etc. Tubing will be used for bicycle frames, fluid power & heat transfer applications. Specs. must be requested from below address, telex no. 41175, prior to submitting offers. Equip. will be installed in welded pipe plant at Derventa. Obtain specs from—Unic Komerc, Promet Opreme, Omladinsko Setaliste B.B., 71000 Sarajevo. Refer to bid no. SL 38/77. Bid deadline, Oct. 27.

● **9915201—MOROCCO**—Three-phase livestock development program on SNDE-owned ranches in 15 locations varying in size from 400 to 20,000 hectares, with total area between 65,000 & 69,000 hectares. Phase 1—diagnosis of soil, climate, water resources & pasture potential of various properties. Phase 2 is further study sites & will cover identification exact area within property studied, inventory existing infrastructure, study existing livestock industry. climatic study, soils reconnaissance, hydrological study, vegetation study existing pastures, preparation map combining findings of above studies, & identification of 2 to 4 projects suitable for each property chosen by Phase 1. Phase 3 is feasibility study of projects selected from among those proposed by Phase 2 & will incl. analysis of types of animals (presumably cattle or sheep) recommended; feed needs incl. evaluation pasture grasses & other forage & seed requirements; machinery & equip. needed for soil preparation, harvesting, conditioning & storage forage, & transport; qualifications & number of personnel required; water supply, bldgs. & animal maintenance equip.; operation & management of range & pastures incl. preparation, seeding, fertilizing & harvesting; management livestock; & cost/benefit analysis with 10-yr. projection & recommendations for financial structure of units which will operate ranches. Bidders may also submit variants incl. their participation in 1 or more projects in form of tech. asst., equity participation, or management contract. Financed by Moroccan central govt. investment budget. Specs. available from Dept. of Commerce, TOP, Rm. 2321, Wash., D.C. 20230, tel. 202-377-2251. With submission, bidders are to include copy of specs. delivered by Commerce Dept. & initialed by bidder on all pages; bid bond equal to 5 percent total amount either in check or bank guarantee, & check for DH 100 or U.S. equivalent as payment for specs. Strongly advise bid submission in French language. Refer to "Etude Et Amenagement Des Terrains De Parcours". Submit bids to—Monsieur Le Directeur General, S.N.D.E. Societe Nationale Pour Le Developpment De L'Elevage, 5, Zankat Sala (Tour Hassan), Rabat. Bid deadline Oct. 20.

● **9916400—EL SALVADOR**—Construction of 124.8 kms., 5-6 meters wide, all weather (gravel) rural roads as follows—San Juan Opico-San Pablo Tacachico-San Isidro, Dept. of La Libertad, 25.5 kms., 6 meters wide; San Isidro–Nueva Concepcion, Chalatenango, 12.0 kms., 6m; Nueva Concepcion-Potrero Sula-Guarnecia, Chalatenango, 19.9 kms., 5m.; Cruisnahuat-Litoral, Sonsonate, 14.7 kms., 5m.; Guazapa-Quezaltepeque, La Libertad Y San Salvador, 16.8 kms., 5m.; Suchitoto-Aquacayo-Consolacion-Colima, Cuscatlan, 17.0 kms., 5m.; San Alego-Canton La Paz, La Union, 18.9 kms., 5m. Financed by govt. & IDB loan. Bid no. 472/SF-ES. Bid docs. available at address below, in exchange for 5 rolls Ozalid paper 50 meters long by 1.10 meters wide for each project. Offers can be presented for each, several or all projects listed. Bid bond 2 percent of bid, performance bond 10 percent of contract, & good quality of work bond 5 percent; with latter withheld from each partial payment made to contractor. Advance payment could be granted up to 10 percent contract. Obtain bid docs. from—Proveeduria Especifica De Obras Publicas, 12 Calle Proniente no. 228, San Salvador. Bid deadline Oct. 14.

● **9918100 — MALAYSIA** — Applications invited from suitably experienced firms wishing tender for supply, delivery, erection, setting to work, commissioning & maintenance for period 12 calendar months of 3 units of 25,000 kw industrial type gas turbo-alternators complete with generator transformer, cabling, switch-gear & fuel tanks. Obtain copy of brief description and make formal application for docs. at Deputy Gen. Mgr. (Planning & Construction), National Electricity Bd., P.O. Box 1003, 129 Jalan Bangsar, Kuala Lumpur. Refer to tender no. JMK/14473. Bid deadline Oct. 14.

● **9918104 — MOROCCO** — Construction of basin in sea, protected by 2 jetties. Total length jetties 900 meters. Installation, inside basin, water-intake, filtering station & pumping station, as well as other subsidiary installations to serve 2,500 mw Mohammedia Thermal Power Plant under construction. In first stage, cap. plant will be only 1000 mw. Engineering has been completed on project. Bid for construction only. Financed by Moroccan central govt. investment budget. Obtain bidding file incl. specs. from address below (Service Approvisionnement), against payment of DH 862.50 (approx. U.S. $191) plus postage prior to submitting offers. Strongly advise bid submission in French language. Monsieur Le Directeur De L'Office Nationale De L'Electricite O.N.E., B.P. No. 498, Casablanca. Refer to bid no. 16 700 E. Bid deadline Nov. 12.

Consultancy & services

9924300 — VENEZUELA — Navy General Command Office is preparing survey on installation of operation of floating docks & modular warehouses. Requests catalogs & technical data from appropriate companies. Navy command will not undertake purchase, but rather will submit results of study to Natl. Institute of Ports (INP). INP has petitioned other govt. entities to prepare recommendations as to how present port congestion can be relieved most quickly. Correspondence should be addressed to Jose Hernadez R., Oficina Capitan De Navio, Teofilo A. Portal Lopez, Direccion De Planex Y Control, Operacional, De La Comandancia General De La Marina, San Bernardino, Caracas, Venezuela.

Indonesia's Tendering Rules

The American Embassy in Jakarta has prepared an informal translation of the Government of Indonesia's provisions governing procurement and work contract tenders for government agencies. A copy of the translation is available from the Department of Commerce, TOP, Rm 2321, Washington, D.C. 20230. Tel: 202-377-2251.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Miscellaneous nonmetallic minerals

1499 — KOREA — Asbestos; monthly requirement 50 m/t. Dir. sales, agency or distrib. Seeks price quotations, shipping terms & proposal for agency agreement. Firm is registered offer agent, official status required in Korea to represent foreign suppliers & submit price quotations in own name. Reply to—C. K. Pack, Kangs Bros. Apd. Co., CPO Box 6995, Seoul. Cable KANGBROSCO SEOUL; phone 28-2929.

Knitting mills, products

2257325-43—UNITED KINGDOM—Seeks to act as agent for acrylic fleece jersey cloth. Agency estab. over 40 years doing very large turnover in women's & men's dressing gowns. Has substantial inquiries from several leading customers for 9/11 ozs. per yard acrylic fleece jersey cloths in widths 120/130 cms. (approx.) suitable for dressing gowns. Cunart seeks excl. agency for U.S. mill. Ref.—Barclays Bank Ltd., 15 Gt. Portland St., London W.1. Cable CUNARTSILK LONDON. Reply to C. N. Nathan, Mng. Dir., The Cunart Co. Ltd., 231 Oxford St., London W1R 2HA. Tel (01) 437 1355/7; telex 265965 CLUBINTL.

Wood products

2499582—NETHERLANDS—Seeks to represent U.S. producer of wood novelties. Estab. 1921, staff of 6, auth. capital Fls. 100,000, annual sales Fls. 3,000,000. Represents 3 U.K. & 2 French firms. Recommend transactions on secured basis. Reply to P. C. Graas, Mgr., Louis Blok BV, 15 Beethovenlaan, Naarden. Cable ELBENA; telex 26401; tel. 02159/46092.

Fabricated rubber products

3069858—VENEZUELA—Wishes to establish distribution of diving suits & jackets. Has license to allow duty-free importation into Margarita Free Trade Zone. Reply to Paul Losch F. & Cia. S.R.L., Apartado Postal 305, Porlamar, Estafo Nueva Esparta, Venezuela. Tel. 23123 Porlamar.

Glass products

3231571—FRANCE—Automotive rearview mirrors. Estab. 1951; employs 280 & 12 salesmen. Mfr. of tubular equip. & accessories for recreational equip.; importer & exporter; wishes import & distribute in France automotive accessories & automotive maintenance equip. Marketing territory, Europe; according to firm's statement annual sales reached 47,757.040 francs. Bank ref. Banque Nationale De Paris, 9 Ave. De Paul Langevin, 94 Montreuil. Reply to—Pierre Perrey, Germain Et Lejour, 106, Rue De La Jarry, 94300 Vincennes. Telex 220889F; telephone 374-2687.

3231571—FRANCE—Automotive rearview mirrors. Estab. 1975. Employs 2. Marketing territory—France, Middle East. Capitalized at 1,000,000 francs. Bank ref.—Banque Francaise du Commerce Exterieur, Paris. Reply to—Mr. Perronnet, Pres., Cofitra, 122, Avenue des Champs-Elysees, 75008 Paris. Cable COFITRINTER; tel. 225-9161; 359-3537.

Cutlery, hand tools

3423121 — FRANCE — Mechanics' hand tools—wrench sets (metric). Estab. 1965. Employs 7, & 9 salesmen. Marketing territory France. According to firm, annual sales volume reached 1,200,000 francs. Bank ref.—Bprop, Saint-Cloud, 92000. Reply to Yves Comte, Pres. & Gen. Mgr., Hymeca S.A., 80 Rue Jean Jaures, 92270 Bois Colombes, France. Telex HYMECA 611378; tel. 780-4060.

Heating apparatus, plumbing fixtures

3433417—UNITED KINGDOM—Seeks to represent supplier of propane/butane gas heaters for greenhouses. Co. specializing in greenhouse & gardening products; mfr. electric seed propagators & greenhouse watering systems. Seeks propane & butane gas heaters suitable for greenhouses, & other accessories & equipment, for garden & greenhouse. Ref.—Barclays Bank Ltd., 4 Vere St., London W1A 4LT. Telex 888941 LGC-G, PREFIX JEMP J9. Reply to—P. D. Williams, Dir., Jemp Engineering Ltd., Canal Estate, Station Rd., Langley, Bucks, SL3 6EG. Tel. Slough 48327; cable JEMP SLOUGH.

Metal stampings

3466157 — NETHERLANDS — Direct sale & representation opportunity for safety closures. Estab. 1934, staff 200, auth. capital Fls. 6,000,000, annual sales Fls. 30,000,-000. Belongs to Cotelle & Foucher SA, Paris, & AKZO NV, Arnhem, Netherlands. Banker: Banque de Paris et Pays Bas, Amsterdam. Open account trading warranted. Reply to—H. Oosterink, Mgr., Grada Producten BV, P.O. Box 8449, Haarlemmerweg 512-516, Amsterdam. Phone 020/823050.

Machine tools

3545100-300, 3423200 — FRANCE — Small cutting tools for metalworking machine tools; attachments & accessories for small machine tools; cutting hand tools, all types. Estab. 1960, employs 17. Agent & distrib. of cutting tools, hand tools, measuring devices & attachments for machine tools. Annual sales $1 million. Bank ref. Banque Nationale De Paris, Bred. 75011. Reply to—Mr. Moisnard, Gen. Mgr., Europ Outils, 22 Passage Dumas, 75011 Paris, France. Telex 280823 ITSER; telephone 371 67 67.

Special industrial machinery

3559589—FRANCE—Seeks to act as distributor for pharmaceutical industry machinery & equipment. Small co. specializing in mfg. plastic components for pharmaceutical industry & acid containers, transfer systems, mixing devices, etc. Marketing network covers France. Financial references—Banque Nationale de Paris, Societe Lyonnaise. Reply to M. Monteil, Marketing Mgr., Sleti, 8, Rue des Rivieres, 69370 Saint Didier au Mont D'Or, France. Tel. 83.64.49.

Miscellaneous mfgd. products

3563189, 3999713 — NETHERLANDS — Firm seeks to act as representative for paint sprayers & accessories & garden umbrellas. Estab. 1925, staff 52, auth. capital Fls. 500,000, annual sales Fls. 20,000,-000. Recommend initial transactions on secured basis. Reply to—Dr. E. L. G. Nieboegn, Mgr., Nieboer B.V., P.O. Box 5009, Groothandelschentrum, Groningen. Cable NEZON; telex 53474.

Communications equipment

3662681—FRANCE—Small co. mfg. & importing hardware & building supplies seeks to act as representative for producer of automatic garage door openers. Marketing network throughout France. Prices f.o.b. should not exceed $100. Reply to M. Gautier, Gen. Mgr., Societe Metil 38, Rue Cholopin 69007, Lyon. Telephone 72.36.61.

Electrical machinery, equipment, supplies

3693090 — NETHERLANDS — Agency sought for cardiovascular products & apparatus. Firm is majority participant of Shiley Inc., Irvine, Calif., represents 11 U.S. firms incl. Medrad, Quinton, Physio-Control, Sarns, Arco, sells to western & eastern Europe. WTDR 08/77. Reply to—A. F. Brack, European Sales Mgr., Hilekes BV, P.O. Box 202, Stargardlaan 13, Bussum, Netherlands. Cable HILMED; telex 43942; tel. 02159/43243 & 46060.

Measuring & controlling devices

3825239—FRANCE—Firm seeks to act as distributor for engine analyzers, test & tuneup kits for car engines. Estab. 1965. Employs 7, & 9 salesmen. Marketing territory France. According to firm, annual sales volume reached 1,200,000 francs. Bank ref.—Bprop, Saint-Cloud, 92000. Reply to—Yves Comte, Pres. & Gen. Mgr., Hymeca S.A., 80 Rue Jean Jaures, 92270 Bois Colombes, France. Telex HYMECA 611378; tel. 780-4060.

Manufacturing industries

3999713—NETHERLANDS—Firm wants to act as excl. agent and/or distrib. for garden umbrellas. Estab. 1921, staff 6, auth. capital Fls. 100,000, annual sales Fls. 3,000,000. Represents 3 U.K. & 2 French firms. Recommend transactions on secured basis. Reply to—P. C. Graas, Mgr., Louis Blok BV, 15 Beethovenlaan, Naarden. Cable ELBENA; telex 26401; tel. 02159/46092.

Special products

9950014—UNITED KINGDOM—Distributorship sought for do-it-yourself products. Mfrs. toiletries, proprietary medicines, adhesives, employs 3,000 & has sales force of 300. Exports world wide, & has office in Clifton, N.J. Annual sales 40 million pounds sterling. Newly formed Leisure Work Products unit will have as base own nationally advertised products currently sold in U.K. by agents, but will be of sufficient strength in marketing & sales field to accommodate U.S. items in both stationery & hardware/DIY field. Presently seeking writing instruments & ancillary products, DIY aids & small hand tools. Ref.—Midland Bank Ltd., Pall Mall, London SW1. Reply to—S. P. Hockley, Gen. Mgr., Leisure Work Products, Beecham Proprietaries, Beecham House, Brentford, Middlesex TW8 9BD. Tel (01) 560 5151; tx, 935986; cable BEECHTOIL BRENTFORD.

Abu Dhabi Tenders Law

A copy of Abu Dhabi's 1977 Tenders Law, which defines rules and procedures for the tendering and awarding of Abu Dhabi Government projects, is available from Dept. of Commerce, TOP, Rm 2321, Washington, D.C. 20230. Tel: 202-377-2251.

Visiting Buyers & Officials

ISRAEL—Amnon Lapidot of Tel Aviv is looking for representation for **wire rope, forged fittings and chain forged fittings**, i.e., shackles, grab hooks, turn buckles and master rings for slings for aircraft, marine and land transportation/lifting equipment. For further information contact Theresa E. Rettig, Foreign Buyer Program, U.S. Department of Commerce, Room 2322, Washington, D. C. 20230; 202-377-3265.

SWEDEN—Businessman visiting U.S. late September seeks contact with suppliers/manufacturers of **wire processing machinery and equipment.** Contact Jim Nader, U.S. Department of Commerce, Foreign Buyer Program, Room 2322, Washington, D. C. 20230; 202-377-3265.

NIGERIA—S. Fagbohun of Ibadan is interested in **machinery and equipment to produce 1,000 pairs of trousers and 250 jackets per 8-hour working day.** He is also interested in **technical know-how** to supervise and direct the production and training of employees. Contact Theresa E. Rettig, Foreign Buyer Program, U.S. Department of Commerce, Room 2322, Washington, D. C. 20230; 202-377-3265.

ETHIOPIA — Businessman visiting U.S. seeks contact with manufacturers of following items: 1) **vinyl**—in rolls, assorted colors, 10-20 tons; 2) **zippers**—assorted, loose or individual; 3) **mobile medical unit**, either new or second hand, with complete medical facilities on board. For further information contact Asrat Getahun, 703-841-0262.

SWEDEN—Thomas Hniopek of Stockholm would like to represent U.S. firms who manufacture **automatic garage door openers**, through Scandinavia. For more details contact Theresa E. Rettig, Foreign Buyer Program, U.S. Department of Commerce, Room 2322, Washington, D.C. 20230, 202-377-3265.

YEMEN ARAB REPUBLIC—Group of Yemeni businessmen interested in establishing a **soft drink bottling facility** in Yemen. Operation would be turnkey and include all facets of bottling industry, though group would prefer cans to bottles. Will require U.S. expertise on construction, supply of machinery and management and operation. Interested firms reply directly to Ahmad Abdullah Salim, P.O. Box 4406, Taiz, with copy of correspondence to Commercial Officer, U.S. Embassy, Sana, c/o Department of State, Washington, D.C. 20520. OPIC.

ECUADOR—Edmundo Jordan of Guayaquil is interested in hearing from U.S. manufacturer of **automotive body metal forming and bending machine tools.** For further information contact Theresa E. Rettig, 202-377-3265.

NIGERIA—R. A. Odunola of Ibadan is interested in purchasing men's, women's and children's **clothing** suitable for the tropics, **laboratory equipment** for both medical and university teaching, **copying machines and hand and desk calculators.** Theresa E. Rettig, 202-377-3265.

JAPAN—Yaskia Nambu of Osaka-Kobe is interested in buying the following items: men's, women's and children's **jeans, pants, shirts and jackets** as well as **leather jackets and sweaters** both new and used. Contact Theresa E. Rettig, 202-377-3265.

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Baltimore, 21202, 415 U.S. Customhouse, Gay and Lombard Sts. (301) 962-3560.

Birmingham, Ala., 35205, Suite 200-201,908 S. 20th St. (205) 254-1331.

Boston, 02116, 10th Floor, 441 Stuart St. (617) 223-2312.

Buffalo, N.Y., 14202, Room 1312, Federal Bldg., 111 W. Huron St. (716) 842-3208.

Charleston, W.Va., 25301, 3000 New Federal Office Bldg., 500 Quarrier St. (304) 343-6181, Ext. 375.

Cheyenne, Wyo., 82001, 6022 O'Mahoney Federal Center, 2120 Capitol Ave (307) 778-2220, Ext. 2151.

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New York, 10007, 37th Floor, Federal Office Bldg., 26 Federal Plaza, Foley Sq. (212) 264-0634.

Newark, N.J., 07102, Gateway Bldg. (4th floor) Market St. & Penn Plaza (201) 645-6214.

Omaha, Neb., 68102, 1815 Capitol Ave., Suite 703A (402) 221-3665.

Philadelphia, 19106, 9448 Federal Bldg., 600 Arch St. (215) 597-2850.

Phoenix, Ariz., 85073, 2950 Valley Bank Center, 201 N. Central Ave. (602) 261-3285.

Pittsburgh, 15222, 2002 Federal Bldg., 1000 Liberty Ave. (412) 644-2850.

Portland, Ore., 97204, Room 618, 1220 S.W. Third Ave. (503) 221-3001.

Reno, Nev., 89509, 2028 Federal Bldg., 300 Booth St. (702) 784-5203.

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